

AMERICAN VETERINARY REVIEW,

SEPTEMBER, 1894.

NOTICE.—Please address all communications regarding matter for publication, books for Review, Exchanges, etc., to the Editor, 139 and 141 W. 54th St., New York.

EDITORIALS.

UNITED STATES VETERINARY MEDICAL ASSOCIATION.—*Committee on Colleges.*—Notwithstanding the fact that the Committee on Colleges, appointed by the United States Veterinary Medical Association, was called and held on the 14th of July, we were not provided with a report of the transactions of the meeting until the 28th, when our issue for the month of August was already delivered. This is our excuse for not giving to President Hoskins' kind communication an earlier publicity. To him we address our thanks for remembering that through the REVIEW the members of the profession can learn of the good beginning made by the committee at their first meeting.

Of the twelve or fifteen places of veterinary education in the *United States*, six had representatives at the meeting—Harvard, the New York College, the McKillip, United States, Pennsylvania University and the Kansas (by proxy) were represented.

The American, the Chicago, the Ohio, the National, the Detroit and others were absent.

We can account for the absence of representatives from the American which because of utter impossibility could not be represented even by its dean, and it is probable that the letters of excuses were presented from that school as from the others.

We publish below the minutes of the whole meeting as ad-

dressed to us by President Hoskins, and with them the recommendations offered by the new formed association of veterinary faculties, and a resolution passed at the Veterinary Association of the District of Columbia, all of which will, we are sure, point to the valuable work which is in store for the profession in a short time to come.

The recommendations adopted by the committee (why congress?) are in conformity to a great extent with a certain paper on veterinary education in Chicago which, on account of time, it is supposed, brought on so little discussion at the time. Lengthening of the course, proper matriculation examination, were endorsed. This last, however, not altogether in accord with the fact, as they exist, but in doing injustice to one school. The requirements at the American Veterinary College are the same as those at Harvard, and neither can be recommended yet as a standard, as we have every reason to believe that they will be altered and made more stringent at an early date—consequently cannot be endorsed.

Section 3d, on the preservation of matriculation examination papers for inspection, is an excellent suggestion, though we fear will be difficult to carry out and may prove a very delicate work.

Section 4th, on the uniform title, is laid on the table for further consideration. What a pity! Why?

We cannot help regretting that the committee has not seen fit to add a seventh section, one relating to the election of professorship. While it might not have been acted on at once, it would have given time to every member of the committee to think about it, and it is worth thinking.

But altogether the work done was of great value. Once for all we regret our forced absence, and fear that when the next meeting is called we will not have reached America on our way back home—yet we will try. And in looking for immense results from the committee and the new-formed association, we sincerely wish that they will remember that their origin is the *United States Veterinary Medical Association*, composed of active mem-

bers of the *United States Veterinary Profession*, who have in view her elevation as an *American* profession, and that as such they will assume a name and hold their meetings, as the *Association of Veterinary Faculties of the UNITED STATES*.

The proceedings received read as follows:—

Congress of Veterinary Colleges of North America, convened under the auspices of Committee on Congress of Colleges of the United States Veterinary Medical Association, held at the Genesee House, Buffalo, N. Y., Saturday, July 14, 1894.

The meeting was called to order at 12 noon, Dr. W. Horace Hoskins, Chairman of Committee, presiding.

The following members of the committee present: Drs. W. Horace Hoskins and A. W. Clement.

Delegates from colleges present: Harvard—Dr. Charles P. Lyman and Dr. F. H. Osgood; New York College—Drs. H. D. Gill and J. H. Huddleston; McKillup—Dr. Schwarzkopf; U. S. College (Washington)—Dr. C. Barnwell Robinson; University of Pennsylvania—Dr. J. W. Adams; and Kansas City College was represented by Dr. Hoskins as delegate, per instructions, from said school.

Dr. Nelson P. Hinkley, of Buffalo, was appointed by Chairman Hoskins to act on the committee in place of Dr. C. C. Lyford, absent.

The following recommendations were adopted by the Congress of Faculties:—

1. Length and Number of Sessions:—

That it is the sense of this meeting that hereafter all veterinary schools issuing diplomas shall require attendance on a course of instruction extending over three years of not less than six months each, the time to be counted from the commencement to the end of the actual instruction given in each year, exclusive of time devoted to final examinations, and that no diploma shall be issued to any candidate until he has complied with all such requirements.

2. Matriculation Examination:—

That the first four sections on page 405 of the Harvard announcement, under the head of admissions, be recommended for adoption. 1. That "each applicant will be required to read aloud a selected passage from ordinary English prose; 2. To write legibly and correctly an English composition of not less than 200 words; 3. To write English prose from dictation; and, 4. The simple and compound rules of arithmetic, including decimal fractions."

3. Preservation of Matriculation and Examination Papers:—

Moved that we recommend to the Committee of the United States Veterinary Medical Association that all colleges be instructed to retain and preserve, for the period of six months, all examination papers, and that they be open for inspection by any properly constituted board.

("The final examination in any subject, or division of a subject, of the course as given in the school.")

4. Uniform Title:—

That the further consideration of a uniform title be laid upon the table for future consideration. Amended, that this subject is not to be taken up for discussion until after six months' notice of that coming discussion has been given to all the schools.

5. Number of Veterinarians on Teaching Staff:—

That it is the sense of this congress that there should be at least four veterinarians attached to all veterinary schools issuing diplomas.

6. Association of Veterinary Faculties:—

For the purpose of encouraging a closer and better acquaintance among the members of such faculties, and offering to them a chance for an exchange of views regarding the better methods of education.

Moved that an association, to be known as the Association of Veterinary Faculties of North America, be organized here, and that temporary officers be elected to serve until the first regular meeting, which shall be held in Philadelphia, the third Monday in September, when permanent officers will be elected.

Dr. Charles P. Lyman was elected President pro tem. of this association, and Dr. Schwarzkopf, Secretary pro tem.

Recommendations Offered by Association of Veterinary Faculties.

1. Dr. Osgood moved that a committee be appointed to draw up a constitution and by-laws at the next meeting.

Committee elected—Dr. Schwarzkopf, Chairman; Drs. F. H. Osgood and J. W. Adams.

2. Moved by Dr. Gill, seconded by Dr. Adams, that the Committee on Constitution and By-Laws be instructed to draft and send a proper letter to the faculties, inviting them to attend the next meeting of the association, and stating the objects of the association.

3. Moved by Dr. Osgood, seconded by Dr. Robinson, that the committee appointed by the United States Veterinary Medical Association to convene this congress be invited to be present at the first meeting of the organization, in Philadelphia.

4. Moved by Dr. Osgood, that this body extend a vote of thanks to the Committee of the United States Veterinary Medical Association for their attendance here, and the work they have done in bringing about this congress.

5. Moved by Dr. Hoskins, representing the Kansas City Veterinary College, that this association asks at the hands of the United States Veterinary Medical Association an expression of opinion as to what disposition they would make of an applicant for admission who had elected on entering the college to take a three years' optional course in a two-year school, as to whether such candidate would be eligible to membership in that association?

At a meeting of the Veterinary Association of the District of Columbia, held on June 30, 1894, the following preamble and resolutions were unanimously adopted:—

Whereas, on account of the present and constantly increasing number of institutions teaching the science of veterinary medicine, and the marked tendency of many of them to require but a short and insufficient period of study and attendance, be it

Resolved, That a uniform standard of time and other requirements should be established and recognized. The term of attendance not to be less than five (5) months for three years. The requirements and branches to be taught should be decided upon by a board composed of one representative from the veterinary faculty of each institution wherein the science is taught.

Resolved, That should the foregoing seem impossible of conception, then, that a national board of examiners, composed of one delegate from each state veterinary society, should propound a number of examination questions to be changed yearly and to be used by the State Board of Examiners, who shall sit at a specific time and place to examine any graduate of veterinary medicine who may appear before them. Said board to be elected by the State Society.

Resolved, That the various state legislatures should be asked to co-operate with said boards of examination from said board of examiners. ACHESON, *Sec.*

On motion of Dr. Osgood the foregoing was received and spread upon the minutes.

PROFESSIONAL ETIQUETTE.—What an important subject. How broad a field it covers, and yet how simple it is, and under what narrow limits it could be bound. In the issue of this month our friend, Dr. Giffen, offers us a paper read before one of the meetings of the Veterinary Medical Association of the County of New York. The Doctor has done well, as all of us can see, but how concise he has been. His paper could have covered the entire issue of this month's REVIEW, and would yet have been concise. Deontology is a thing unknown, we might say, among veterinarians. Professional etiquette is, in many instances, only in the codes of ethics of the societies. But how far are they carried out?

In fact it is a question for us, how could it be otherwise? Are not those, from whom our young men could take example, themselves guilty of breach of ethics? And when we find this one or that one calling himself a V.S., D.V.S. or others alike, or qualifying himself as a graduate of this school or that college, or of that university, we are asking ourselves whether he is committing a breach of ethics more serious than Mr. Smith, who qualifies his card, the heading of his letter paper, or the corner of his envelope with his title of Professor of . . . Is the non-graduate, who tries to impose himself by an assumption of a title to which he has no claim and for which he can be prosecuted as being assumed—is he doing a more unprofessional act than he who advertises himself as an officer of this society or a member of that society. We think not, and when we bear in mind that the Committee on Colleges of the United States Veterinary Medical Association is going to take into considera-

tion matters of no little importance to the elevation of the veterinary profession, we think it will not be out of place in suggesting the subject of the creation of a chair of *Veterinary Deontology* as one of the most important. Younger men in the profession have almost an excuse for mistakes in complying with the requirements of a code of ethics of which they have heard nothing until they graduate. They are likely to drop in errors in following the doings of their predecessors, or their teachers, or perhaps of their alma mater.

Perhaps it will be thought hard for us to speak as we do, for after all this is not the only country where breaches of ethics are observed. English periodicals give us now and then articles of complaints of similar nature. No doubt the same state of affairs exists on the Continent; but across the Atlantic these may be excused—they are part of their organization, they exist since the birth of the veterinary profession over there, and on that account cannot be abolished readily. But here, where veterinary science is scarcely born, where it is young anyhow, it cannot be hard to do away with the tendency which shows itself, and, in fact, it can readily be gotten rid of if a good example is set by those to whom the younger generation is looking. Less humbug on this point will bring on wise imitation and better etiquette on the part of the others.

MEETING OF THE UNITED STATES VETERINARY MEDICAL ASSOCIATION.—The issue of September has always been for us a good opportunity to remind veterinarians of this country of the anniversary meeting of the United States Veterinary Medical Association. In our last number we published a letter from the worthy president in relation to the meeting, which we had received previous to our vacation and before the official notice of the secretary was in our hands, and to which we may add the information that Dr. L. McLean of Brooklyn will read a paper on "Horse Shoeing."

Imperfect as our present remembrance is, let us call the attention of our readers to the fact that on the 3d Tuesday of this month, at Philadelphia, the anniversary of the United

States Veterinary Medical Association is to take place; that two days will be employed in the transaction of business, reading of papers, discussions, etc., and that the entire proceedings are to be under the guidance and hospitality of these good veterinarians, the Pennsylvanians. Every one who can must be there. Everyone will be there? And if any are prevented from being present we hope, if we are favored with copies of all the proceedings, to present these to our readers and show them what they have missed by being absent.

NEW YORK STATE VETERINARY SOCIETY.—This month also the annual meeting of this society will take place. Important papers are promised. The veterinarians of the Excelsior State are hard at work. No doubt it will be a good meeting also.

VAN SWIETEN SOLUTION.—In compliance with the desire of some of our readers who have expressed their wish to try this preparation as suggested in our July issue, for the treatment of suppurative articular diseases, we give here the mode of preparation for veterinary purposes, which differs but little from that used in human medicine. After all it is only a bichloride of mercury solution.

R. Corrosive sublimate, 4 grammes (1 drachm).
Alcohol, 90 grammes (3 ounces).
Distilled water, 2½ liters (2½ quarts).

After pulverizing the bichloride, it is dissolved in the alcohol and the water added to it.

ORIGINAL ARTICLES.

PYOMETRA IN A CAT.

By T. S. CULLEN, M.B., Assistant Resident Gynecologist,
The Johns Hopkins Hospital.

It has been thought advisable to publish this case on account of the apparent rarity of the affection, and also, because both cornua uteri reached such an immense size.

The cat from which the accompanying specimen was obtained was brought to the Pathological Laboratory of the Johns Hopkins University and the following history was given by the owner.

The animal's abdomen commenced to enlarge six years ago; the swelling gradually increased since then. She had no kittens during this period. Locomotion was difficult on account of the large abdomen. Her general health was said to be good and her appetite normal. One week before her death the umbilical girth was 70 cm. There was very little sagging in the flanks and on percussion a distinct wave of fluctuation could be elicited. The death was gradual, the animal in the last few days refusing to eat.

Autopsy by Prof. Welch.—On opening the abdomen it was found to be perfectly dry. The vagina just within the orifice was greatly constricted, not admitting the finest probe. Above this it was slightly dilated. Both uterine cornua were enormously dilated throughout their entire length resembling sausages in their contour. The length of each was 45 cm. and the maximum diameter 25 cm. Each presented three constrictions with corresponding bulgings. Both passed outward, upward and then downward and inward.

They were smooth and glistening and of a pinkish color. On their anterior and posterior surfaces, however, near their origin were large areas covered by whitish nodules varying in size from a pin's head to 2 mm. in diameter. These were not surrounded by any inflammatory zone. Similar nodules were present along the lines of constriction. Numerous branching blood vessels were seen coursing over the walls of the cornua. Shining through the walls, especially over the middle portions of the cornua, were many small irregular dark red patches, resembling ecchymoses. The cornua together contained 2600 cc. of a thin, dirty, greyish white pus. This had no odor, contained many large cells filled with fat droplets, polynuclear leucocytes, detritus and myriads of short bacilli with rounded ends. These bacilli were half as long again as broad and closely resembled the colon bacillus in form. Cultures from the pus were negative.



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The inner walls of the cornua were smooth and glistening but there were slightly raised areas, corresponding to the dark ecchymotic spots seen externally. Both tubes and ovaries were apparently normal. Nothing further of note was to be seen in the abdominal or the thoracic organs.

Histological examination.—The vaginal mucosa is everywhere intact and appears to be normal. Just beneath the epithelium there are isolated patches in which the connective tissue cells had undergone considerable proliferation.

The cornua are covered externally by flat epithelium, this becomes cuboidal in the vicinity of the white nodules above described. These nodules are composed entirely of connective tissue moderately rich in cells, having irregular triangular nuclei. The nodules have a very scanty blood supply and are intimately adherent to the uterine walls. The muscular coat shows here and there small aggregations of connective tissue cells.

The mucous-membrane in some places is represented by one layer of cylindrical epithelium, in other parts by a few round glands, and corresponding to the dark patches hæmorrhages had taken place in the stroma of the mucosa. The surface epithelium over such areas is raised from the stroma by the blood but is everywhere intact.

One might at first sight be inclined to think that there was atrophy of the mucosa but taking into consideration the extreme distention of the uterus there was probably no atrophy.

Sections from the bladder, tubes, ovaries and liver showed the structures to be normal.

The exact cause of the condition in this case cannot be stated positively, but the constriction near the vaginal outlet may have been the exciting factor. It is interesting to note the slight alteration that has occurred in the vaginal and also in the uterine walls, there being apparently only little increase in the connective tissue elements. The fibrous nodules have probably been produced by a mild peritonitis set up by the cornua rubbing against neighboring structures.

The fact that the surfaces of the cornua on either side of the

constrictions were covered by these small nodules, as above mentioned, also seems to indicate that these nodules were caused by friction of the opposing surfaces on each other.

Description of Plate.—The view is from the posterior. It shows the narrowed vagina, the bladder, and the dilated left uterine cornua. Only the commencement of the dilated right cornua is seen. The left tube and ovary are also visible.

The small nodules are seen at the commencement of the right cornua.

ACUTE INDIGESTION.

BY DR. J. W. IRELAND, Quincy, Ill.

A paper read before the Illinois State Veterinary Medical Association.

In the long list of sporadic diseases, there is probably none of more importance to the veterinary practitioner than that of acute indigestion.

It attacks all classes of horses, but more especially those of the heavier breed and in the prime of life.

From the fact of the suddenness of attack, and the danger of a fatal termination in a few hours, and in some cases minutes, the practitioner should at all times be prepared to apply proper remedies on short notice, both medicinal and mechanical.

No disease presents a better field for a veterinary surgeon to distinguish himself than in the treatment of acute indigestion in the horse and mule.

So sudden is the attack and violent the symptoms that relief given in a few minutes by the use of trocar and medicinal agents proves a veritable boon to the veterinary in charge in particular, and the profession in general.

You do not have to argue that the disease must run a definite course and that we must wait for nature, and assist it as best we can, but we apply remedies that by their chemical action arrest the process of putrefaction and relieve the spasms and irritation that has resulted therefrom.

The causes and symptoms are so well known to all that a passing mention of a few of the most important is all that is necessary. While the most common cause of fermentation of food in the stomach is over-feeding with grain, followed by severe exercise, yet some of the most rapidly fatal cases are caused by wet bran and green clover, thus proving the necessity of admixture of saliva during mastication, and that the first process of digestion must take place in the mouth before it can be continued in the stomach.

The fallacy of giving hot bran mashes after parturition has been proven over and over again by fatal attacks of gastric flatulency. A very good proof of the non-admixture of saliva being a cause of acute indigestion is given in the fact that green clover if eaten while wet with dew or frost is more apt to cause it than when dry. It also proves that moisture favors fermentation and putrefaction, and that the horse does best when fed upon dry food and allowed to do their own grinding, which they were intended by nature to do. The closer we study dame Nature, and allow her to dictate the course to be pursued, the nearer we will be right.

Allowing an animal to drink large quantities of water directly after meals may cause indigestion by diluting the digestive fluids and temporarily diminishing the amount of blood to the stomach and bowels. I think, however, that a small amount of water assists rather than retards digestion by facilitating absorption of that which is already digested.

In the symptoms only a few things may be noted. In the very early stages it might be mistaken for spasmodic colic. By placing the ear to the œsophagus at its entrance to the thorax, a rumbling or gurgling sound will often be heard, caused by the stomach forcing the gases into the œsophagus and being returned to the stomach by the resistance of the œsophagus to vomition. The animal does not throw himself down so violently as in colic, nor are the pains so intermittent.

In drenching it will be noticed that they offer greater resistance than in colic, holding the lips and tongue more rigid, know-

ing as they do that the drench will enter the stomach with difficulty and cause much pain. It is only by the inexperienced that any mistake in diagnosis is likely to be made, and to him the unmistakable signs of the disease soon present themselves.

As to the eructuations of gases and the regurgitation of food being unfavorable symptoms, there seems to be a difference of opinion. I think they are favorable rather than otherwise, and depend more upon the anatomical structure of the œsophagus after passing through the diaphragm than indicating any particular lesion of the disease. For we all know that in some cases we have frequent eructuations of gas when it is quite apparent that the stomach is not distended to any great extent, judging from the actions of the horse.

The continuance of labored breathing after the use of the trocar and cannula is a symptom always to be feared if it continues for any length of time, and is accompanied with trembling of the muscles of the flank and shoulders.

While a thorough knowledge of the causes and symptoms are very necessary, the treatment is by far the most important. The treatment recommended by old writers, and some of the present day, are erroneous and not consistent with sound reasoning. I am of the opinion that such remedies as oil of turpentine, ammonia, and linseed or castor oil should not in any case be given. Diffusible stimulants of any kind in the first stages are contra-indicated. The most efficient antiseptics, antispasmodics and sedatives, in conjunction with the judicious use of trocar and cannula are, in my opinion, the proper treatment. Enemas per rectum in the first stages do more harm than good and should not be used till the fermentation is arrested and excitement of the bowels modified.

The use of eserine or other drastic purgatives, calculated to act upon the bowels during the period of excitement must increase the spasms and do much harm,

As to the use of the trocar and cannula, I think all are agreed that it is of great value. The principal difference of opinion being the time to use it. Some advocate its use only

as a *dernier ressort*, while others claim its use only to be of value before the bowels become fully distended. While I by all means prefer the latter course, yet we must not be too hasty.

Just to what extent the bowels should be allowed to fill before puncturing is hard to indicate, but suffice it to say that the surgeon in charge must use his own judgment, and in no case run risk of rupture, or even severe tension of the bowels.

To have the trocar and cannula in a thoroughly aseptic condition cannot be too strongly recommended.

My experience has been that the right side should always be chosen to puncture, and that no incision is necessary in the horse or mule, but that the part should always be eased with carbolized ointment to facilitate the entrance of trocar as well as the withdrawal of cannula. If gases are being generated very fast the cannula should be allowed to remain in for twenty minutes or half hour. This I think being preferable to puncturing so often.

As to the antiseptics to be used, I think salicylic acid stands at the head. Not only does it arrest fermentation of food in the stomach and bowels, but when absorbed counteracts the poisonous effects of the gases absorbed and is non-irritating.

As an antispasmodic morphine hypodermically, and as a sedative tincture of aconite, sodium sulphite, boracic acid and bicarbonate of soda have all been used with some degree of success.

In indigestion, as in colic, most every practitioner has his own favorite remedy, and if he has been successful should continue its use.

To sum up the treatment in a few words I would say, that we must ever bear in mind a few things. First, the fermentation of food; second, the tendency to inflammation, and third, the danger of rupture of stomach or bowels. Surely, then, we must not give irritating antiseptics and diffusible stimulants to promote inflammation, and must not too long delay the use of trocar and run risk of rupture either partial or complete.

My experience has been that peritonitis is more common than muco-enteritis following indigestion, and usually the result of rupture of the serous coat or extreme tension thereof.

How often we are called in at an advanced stage of the disease. The bowels and stomach are distended to an enormous extent. The trocar is used and partial relief is given, but symptoms of peritonitis remain, and in a few hours the animal succumbs, post-mortem revealing rupture of peritoneum, followed by peritonitis and death.

Having had no experience with the use of stomach-pump, or passing of probang or other hollow tube, either by mouth or per rectum, I will refrain from comment, hoping to get the experience of several present.

Acute indigestion, as a rule, is very satisfactory to treat, yet we meet with cases that seem to be doomed from the very start, and in spite of all we can do the animal succumbs in the unequal contest, and another is added to the already long list of failures to save. Yet all such cases serve a purpose. They tell us that our remedies are not all-efficient, and that we must cast about for some greater antiseptics, and that the science of medicine, as known to-day, is far from being perfect, and that the field for research is vast, and that great things may yet be achieved if we but apply ourselves diligently to the task.

PROFESSIONAL ETIQUETTE.

A paper read before the Veterinary Medical Association of the County of New York.

BY THOS. GIFFEN, M.R.C.V.S., New York City.

A desire to avoid repetition in this paper of many matters which have heretofore been presented, more or less elaborately, to various veterinary associations by essayists who have given the subject of professional etiquette their attention, will, I fear, compel me to be very brief. Brevity, it has been said, is the soul of wit, and if in even a brief treatment of the subject I bring

under your notice a few matters which are worthy of the earnest consideration of my fellow professionals I will have succeeded in giving to my words a soul which will enable them to live later in your thoughts.

Etiquette, socially speaking, may be regarded as a standard set up by time and experience to direct the individual to the path of accepted propriety. There will at all times arise differences of opinion as to what is propriety in social affairs, there being many cases to be decided which are governed by absolutely new conditions and which can only be decided according to a sense of individual propriety. Writers on etiquette have arbitrarily prescribed rules of conduct for society in general, and, although disagreeing in respect to various particulars, they have kept steadily in sight the necessity of upholding a standard for general adoption. I do not think it requires to be argued in order to convince us that society, as well as the individual, needs to protect itself in some way against the freaks of the thoughtless, the vagaries of the audacious and the pretensions of the insolent. The instances are numerous which I might cite in support of this. Nor is there anything incompatible with the spirit of equality in the assertion of a necessity for the existence of such a recognized standard; it is simply an acknowledgment of a right inherent in every individual, a right which concerns his liberty and happiness.

It is none the less true that members of professions find it just as necessary to have an understanding with their fellow practitioners as to matters regarding which there is much opportunity for—and actually is—conflict. Only by a due conformity to that which, written or unwritten, is recognized as professional etiquette can complications between fellow professionals be prevented. The necessity for inculcating the adoption of well defined methods in professional life is apparent to every member of the veterinarian body who has had a mature experience in the practice of his profession. There are many matters of frequent occurrence in the exercise of his duties which bring the veterinarian face to face with difficulties that would be entirely avoided

were there an observance of a strict rule of etiquette between the members of the veterinary profession.

How then, and in regard to what, may a well devised scheme be brought before the attention of veterinarians to the end that the profession may be improved, the practice harmonized, and uniformity prevail in business methods? This is a question which is well worthy the consideration of the entire veterinarian body, and it raises matters of such moment to the profession as entitle it to be answered by them collectively.

Rules or laws there may be, which, in the daily evolution of society, will fail to carry with them general obedience because they encroach on the ideas of propriety which many individuals hold. In essential things, however, there is a universal sentiment which acquires the force of law. Community of interests and a vigilant regard for professional reputation constitute good ground upon which veterinarians (also those engaged in other professions) can come together and settle upon something to be mutually honored by them and which will have the force and effect of recognized law. A great deal may be left to the members of the profession individually as to the way in which the honor and dignity of the profession may be upheld. The honor of the profession should be dear to all veterinarians, and a proper recognition of this will necessarily involve their acting at all times in accordance with the canons of courtesy and refinement. It is no portion of my present task to point out any special path by which veterinarians may best safeguard the honor and dignity of the profession, for I believe that among all reputable veterinarians there is a strong *esprit de corps* and that their public acts will tend to raise rather than lower the profession. Unfortunately, however, there can be found in every country members of the veterinarian body who are not at all solicitous about professional honor and who show for it an indifference which is quite on a level with their unscrupulous business methods.

One of the difficulties to which I have before alluded is an irregular method of charging for services rendered to clients.

When the impression gets abroad that there are several scales of fees among veterinary surgeons for the same class of service, the effect this gives rise to is an unhealthy one for the profession generally. Surely an understanding may be easily arrived at on this point and something be accomplished in the direction of establishing uniform fees in such cases. Continuance of this irregularity must eventually lead to a state of affairs highly demoralizing to the profession and well worthy of being described as "levelling down." There is enough of common interest here to spur on all who have the future interest of the veterinary profession at heart to take action towards the adoption of a uniform system of charges. I have known instances of practitioners agreeing to perform an operation for a low fee simply to obtain a case, when there was not the slightest occasion to make any reduction whatever. Still a client, however willing to pay proper fees, will not fail to take advantage of precedents thus set, when he finds it necessary on a subsequent occasion to bring in veterinary assistance.

Perhaps the most important matter on which veterinarians should come to an agreement as to the course to be pursued towards one another when there is a change of practitioner. There is undoubtedly great room for a well defined policy in these cases. The laxity of many veterinary surgeons in this regard is much to be deplored. I cannot conceive of any relation between veterinarians of such delicacy as this. Failure to live up to rigid professional etiquette must certainly have in the long run a most hurtful effect on all practitioners. It becomes very important, therefore, for veterinarians to lay down a course for their common guidance, commended alike by sound sense and propriety.

While I do not for a moment question the right of owners of animals to change the practitioner; yet there should be some check to those exhibitions of impatience that are sometimes capriciously indulged in when a horse is being treated. Moreover, the interests of the animal demand it. Practitioners who are called in second-hand should insist on a consultation with

their predecessor, and before taking the case in hand they should have a clear understanding that the client has entirely dispensed with the services of the first practitioner. In fact, veterinarians should be very reluctant to replace a brother practitioner when the change is due to mere caprice. The client should be shown that the principle involved is regarded as of greater importance than the securing of a fresh fee or a new case.

When a change occurs the incoming practitioner should be particular to avoid criticism of his brother veterinarian who had first charge. He should not lend his approval to disparaging remarks, more than likely ill-founded, that may be made regarding the preceding mode of treating the case. To act in this way betrays very poor judgment. Veterinarians know how unjust these criticisms usually are, and that often they are directed against a well trained and highly qualified practitioner. A reaction is sure to follow any such encouragement of hostile comment on a fellow professional, and in the interest of the profession such a course is to be deprecated. Whether such style of comment is made to simply chime in with the fault-finding of a client or his representative, or whether it is due to a more malicious purpose, it lowers in public esteem the value of veterinary science.

It must be said that there are some instances of professional rudeness that almost seem incredible. I have in mind a case in which a veterinary surgeon was called in where another one had preceded him. The new-comer without informing himself regarding the treatment adopted by his predecessor began work by smelling a bottle which he found convenient, afterwards breaking it, and exclaiming that he could have saved the life of the horse but for the way the other practitioner had treated the case.

I have also known a case in which a veterinarian, brought in secondly, took the balls which his predecessor had ordered and threw them out of the window. An instance is also within my experience where two veterinarians were attending at the same stable to treat their respective horses, and one of them was in

the habit of going up to the horse which his brother was treating and saying to those who were in charge of the animal that unless there was a change of treatment the beast was sure to die. This sort of conduct is highly reprehensible, and its effects reach far beyond the practitioner who is thus assailed in his absence. Such cases degrade the profession.

I do not pretend that there should be perfect unanimity among veterinarians in all things. For instance, I do not expect that they will agree when called upon to give expert testimony; but their relations to one another in essential matters of practice should be better understood. It is reasonable to expect from them a common action in regard to those matters which affect the elevation of the profession and the extension of the influence of the veterinarians.

The value of organization needs to be much better appreciated by the veterinary profession. There is nothing to which the learned professions owe more to-day than that interchange of views which comes from personal intercourse with fellow professionals and the general educational influences of societies. All veterinarians who look to the higher development of their profession should become connected with the veterinary associations of their localities. Here they will put themselves in the way of the advantages which accrue from organization. It is by meeting one's fellow-workers in any given field that a man acquires an enlargement of scope which is destructive of petty jealousy and productive of broader views. The great work done in other countries to break down professional jealousy is mainly to be attributed to healthy organization. When men know each other they will learn to differ amicably and bury their little bickerings. Let everything be done to strengthen the relations between veterinarians. Let them avail themselves of the opportunity to improve their status as veterinarians. The three years' system will give us a well equipped acquisition of new blood, and older brethren must be up and doing that they may not lag behind. They cannot do better than keep in touch with their fellows on all matters of etiquette and instruction. Veterinary

societies will prove to them both interesting and profitable institutions.

I have endeavored in this paper to draw your attention to some matters which I trust will be deemed worthy of earnest consideration, and in concluding I desire to express the hope that the importance of veterinarians cultivating improved methods of professional practice will be speedily realized.

THE PRINCIPLES OF ANTISEPSIS IN THE TREATMENT OF ECZEMA.

BY PHILLIP HESELTINE, V.D., V.S., Rochester, N. Y.

While it is true that the antiseptic system has won general recognition, and has become an integral part of the practice of the majority of veterinarians all over the world, it seems to me that the time has not yet arrived for its advocates to feel that their work is done. There still exists a tendency, partly due to the scepticism expressed by a few leading specialists, in both professions, who regard it as a cumbersome method of attaining mere cleanliness, which alone is declared to be the conditions on which the best results can be secured. And by many surgeons and veterinarians the whole thing is looked upon as a fashion, to which they conform in a perfunctory manner, without any profound conviction of its value. Others, again, believe in the principle, but think the methods are in transition state, and that much is yet to be done before they can be fully accepted. I regret to say that I know some veterinarians who still practice surgery without any antiseptic precautions whatever. Where the only claim of the antiseptic system is that it insured or hastened the healing of wounds, or that it rendered operative interference safer, or that it prevented suffering on the part of the patient; on any one of these grounds it would deserve the favorable consideration of all veterinarians, and its acceptance would be an imperative duty. But it appears to me that it does more than all this, for I know of many cases in which it is the direct means of

preserving life; without it a fatal issue would be inevitable. For instance, an operation upon brain-tissue, or those involving exposure of a knee-joint, or those of the gamble-joint, or in operations upon the foot, not only should every precaution be taken against probable sources of contagion, but every possible source should be excluded; hence the chance of air contagion should be duly considered, and should be provided against by removing from the operating room all dust-holding fabrics, taking care to have the floor and operating table thoroughly cleaned and damp by bichloride solution, one part to five parts, immediately before operating and in many cases it is advisable to keep the doors and windows closed from the beginning to the end of the operation. It should be the aim of all veterinarians to reserve as soon as possible an operating room exclusively for all operations. But in dermatology, although the object of its study and its therapeutic actions, the outer integument of the horse's body, is constantly in its entirety exposed to all the dangers of microbe infection, comparatively little has been written in veterinary science of antiseptis. It is true, if we look over the list of remedies generally employed by the veterinarian in the treatment of diseases of the skin, we shall find a large number of drugs the action of which is decidedly an antiseptic one, be it that they have been introduced or discovered only since the antiseptic era, on this very account be it that they had been in use long before, and only on later investigation were found to have antiseptic properties. If thus the veterinarians are actually applying antiseptic treatment, it is apparently often done unconsciously and unintentionally without a proof that they realize the presence of conditions which require antiseptic measures, and without either a clear understanding of the meaning of their therapeutic action itself or the distinct expression of their intentions. Still I believe that a certain lack of pronounced general principles in treatment is one of the obstacles to simplification of dermatological therapeutics and one of the causes favoring the publication in the veterinary journals of the numerous "useful" formulæ for prescriptions against skin diseases. This can be said

with particular force of eczema in the horse, the most important and most frequent among the diseases of the skin. It therefore seemed to be of sufficient interest to briefly consider the conditions in eczema which invite or require the application of antiseptic principles, to inquire into the reasons why this application has not been made in practice and to define the best methods for the same. In approaching the first of these questions, the much debated etiology of eczema can be entirely left out of consideration. It does not make the slightest difference for our position whether eczema is always or in a number of cases a parasitic disease, or whether it owes its origin to nervous or tropic influences or only to external irritation. Among the various opinions prevailing among different schools in regard to its courses it is almost universally acknowledged that, anatomically, eczema is a catarrh, a superficial inflammation of the skin, not extending deeper than into the papillary stratum of the cutis proper. In the majority of the cases corneous layers of the epidermis become detached from the rete Malpighi by a serous exudation either in the shape of vesicles or over a large and more irregularly defined surface, in either instance the thin cover is more or less rapidly carried off by mechanical means and the reddened, moist rete is largely exposed. Experience teaches that the intact corneous layer of the epidermis furnishes ample protection against the entrance through the skin of pathogenic microbes into the lymph and blood circulation, and that the slightest break in its continuity opens a door to infection, not only with the violent elements of suppuration and sepsis, but also with those of syphilis, tuberculosis, scrofula, etc. It is evident, then, that the conditions in eczema referred to above afford the most favorable opportunity for the many microbes with which our atmosphere and our stables, hospitals or infirmaries, is charged. In fact, it has been shown that microbes, pathogenic and apparently non-pathogenic, are constantly found in large numbers and varieties on the skin, so that it seems almost impossible that a portion of the surface deprived of the cover of the epidermis would remain uninfected even for a moment. The

formation of crusts by the drying up of the secretions over some parts or over the entire denuded surface largely increases the danger by giving a certain protection to the growing and multiplying microbes against external injuries, and favors the resorption of poisonous substances. In other cases the contents of the vesicles rapidly become purulent, which are formed by the serous discharge, yellowish or brown crusts cover the surface particularly where the great thickness of hair favors the undisturbed drying of the secretions. It matters not for our purpose whether suppuration is considered an essential feature of eczema or whether the pustules of impetigenous eczema are included in the eczematous process or whether we should consider suppuration as a secondary infection. With our present knowledge we must assume either way that an infection with pus forming microbes has taken place, that conditions similar to those of a suppurating wound or of a suppurating mucous membrane are present. I myself am inclined to believe that suppuration, the so-called stage of eczema impetiginosum, makes its appearance only when local septic infection complicates the moist stage. My experience teaches me that when such an event does not take place the vesicular, or moist eczema, passes immediately into the squamous stage. When the exudation on the surface is not present or in so moderate a degree that no moist surface is presented the excoriations resulting from scratching afford an equally commodious entrance to all kind of septic material, and in their turn often actually become the seat of more or less deeply seated suppuration. Besides in many cases and by closer inspection and a slight effort to remove the scales will reveal the presence of smaller or more extended surface, the scales often preventing the oozing out of the secretions and greatly favoring absorption of septic substances into the lymph system. In other cases, with more infiltration of the cutis and considerable accumulation of horny scales, the formation of cracks will represent another condition apt to become the seat of septic and other infections and in many cases the formation of ulcers, simple or specific. My experience is, as long as suppuration ex-

ists a cure is apparently out of the question. This, I believe, will not be denied even by those who consider eczema as almost a constitutional disease produced by some irregularities in the function of some organ or viscera, or the result of the general condition of many of our stables, and who, as a rule, look to internal or constitutional treatment as the most important part of therapeutics. It would be but natural under these circumstances to apply the same method which we see doing good service in the hands of the surgeons. I do not doubt this often has been done, but in most instances with disappointing results. Due to the extreme heavy coat of hair and negligence by the attendance, we find it is impossible to adopt antiseptics by the same method as the dermatologists and with equally as satisfactory results. While our results may not be equally as satisfactory, we can much improve by a more careful observation on the principles of antiseptics and of the treatment of the past. In the early times antiseptic practice was almost identified with the employment of carbolic acid. Unfortunately this valuable remedy is not very congenial, even to the healthy skin, this is proven not only by the common experience that carbolic acid dressing after a short time is liable to produce inflammation of the skin surrounding the wounds, but by the rather popular use which carbolic acid has found against all kinds of lesions and ailments. I have found but very few cases where carbolic acid was of any benefit in treating diseases of the skin, and I feel convinced that I have treated more cases which had been directly aggravated by its use. Other drugs have taken the place of carbolic acid in the treatment of diseases of the skin and general surgery, but almost invariably has the effect been equally disastrous, particularly with *hydrargyri chloridum corrosivum*. Quoting the language of H. G. Klotz, M.D., New York, who says it is a well known fact that all antiseptic drugs act much more powerfully in solutions than in combination with oils, grease and other constituents of ointments. To introduce antiseptic treatment by the use of water, poultices, and various antiseptics in solution my experience teaches me that it would be very disagreeable

and unsatisfactory even in the hands of the most skilful, while we find that we have to leave the treatment in the majority of cases in the hands of the attendants, who not attaining any knowledge of the principles of antiseptis can scarcely be considered responsible for not fulfilling the direction which he receives from the veterinarian. It can easily be seen why so many mistakes are made and the treatment of eczema so unsuccessful in our patients; after a time the patient is returned and the services and treatment of the veterinarian are rendered fruitless through neglect of the owner, placing the responsibility on the veterinarian (who is considered to be always making blunders); so it appears plainly to me the veterinarian cannot be too strict at all times in giving directions and endeavoring to see they are properly carried out, and I believe in the majority of cases the veterinarian should attend to the treatment himself. Coming to the most practical part of my paper, I will first note as to the careful regulation of the diet; strong food of all kinds should always be forbidden. The digestive tract should be carefully looked after to see that the evacuations, depurations of the liver, bowels, kidneys, are encouraged. These principles, however, should not be of a cast-iron character, but should be modified to suit the patient. I do not believe that there is any one method which would be of a specific character, which could be adopted as a treatment for eczema; it is the eczema patient that is to be treated not only according to the kind of eczema but likewise the diathetic condition of the patient. The veterinarian that treats eczema with the best results is he who analyzes with the utmost solicitude and attention the situation, surroundings, and the daily requirements of his patients and who understands how to rectify the hygienic conditions and re-establish all which he should find to be defective in organs or functions. Among internal medicines useful in eczema, alkalies are to be employed in a large number of cases and in all stages of eczema; especially in strong vigorous horses, arsenic, particularly in the form of arsenious acid may be employed in the more advanced stage of eczema as a modifier of the epithelian function. In many cases

where I have given arsenic by the mouth and have obtained very unsatisfactory results, I have used it hypodermically, commencing at a quarter grain and increasing in a few days to a grain or more with splendid satisfactory results; not giving more than two hypodermics per day commencing to the local treatment of eczema after having suppressed all external irritation, having cleansed the diseased parts, etc., then one's duty is fulfilled, having placed the affected parts in the most favorable position for treatment. There are two principle modes of dressing which I adopt, each one has its use, according to circumstances and locality and they may be used successively or alternately. First styptic colloid, a mixture containing tannic acid dissolved in ether and collodion, which affords great relief and can be applied with a soft brush; it forms a loose scale which mingles with the cutaneous scales, and exudation; it causes no irritation and should be repeated once or twice daily or alternately with the following, taking care to have the parts thoroughly cleansed by castile soap and luke warm water containing half ounce of boracic acid to the quart.

R.	Acidi Salicylici	3 ij
	Resorcini	
	Pulv. Zinci Oxidi	aa 3 jii
	Pulv. Amyli	3 ij
	Lanolini	3 jv
	Acidi Boracici	3 j
	Vaselini	q. s. ad 3 viij—M

Sig. Apply twice daily or alternately with the styptic colloid.

DENTITION DISEASES.

BY DR. I. B. NEWBY, Peoria, Ill.

A paper read before the Illinois Veterinary Medical Association.

In offering these few for your criticism, perchance they may appear as if no one had seen or done any dentistry but myself; far from it. In the Book of books you find this passage, "And if

any man think he knoweth a thing, he knoweth nothing yet as he ought to know;" and any of us who has had much practice, and, in fact, the longer we practice the more we find this Scriptural passage to be an infallible axiom, and if any man in the profession to-day has made more mistakes than I he should be in durance vile or wearing the stripes instead of being at large. But as I happen to know many so-called V. S., who are constantly making irreparable mistakes without any attempt at being scientifically informed or educated, and with whom I have small sympathy, that to-day I came before you, my professional brethren, if my experience related here points you to a danger signal, don't go that way, as Sir William Gull replied, when asked if he did not consider animal experiments cruel: he considered no cruelty compared with that of the cruelty of ignorance.

Therefore, let us consider together a few of the more common diseases of the teeth, laying aside all theory as far as possible. The ones I most commonly meet with are caries, pulpitis, pericementitis, alveolar abscess, traumatic inflammation of tooth and its accessories, with cysts, etc., in sinuses, gangrene of turbinated with complications and such as ophthalmia, dental cough, constitutional disorders, etc. Frey has well said that tooth development is one of the most difficult tasks that embryologists have to contend with. He should also have said that no organ of the body has such a feeble hold on life as the dental pulp; neither is any substance so prone to irreparable destruction, for, without an active and normal pulp, we cannot have a normally developed tooth. Certainly there must be a quantity of nutritive material, and as to quality this should also be normal. These constitutional troubles we often have, and, less the magnitude, about as difficult to understand the etiology as osteoporosis and many times likewise this treatment.

There are many influences which may act upon the developing tooth, as this is the time when the entire system is developing, and we know there are other parts of the body at this period that may be temporarily encumbered by incipient diseases. The

first three molars are most prone on account of the unusual physiological changes taking place; here I think many times the unshed primitive tooth produces much trouble with the succeeding permanent one. These conditions can sometimes be intelligently explained and other times difficult. I have a subject here I think worthy of relating, from the fact that it was a case of constitutional trouble, no doubt. Black filly, Evening Star Standard, by Count Wilkes; bred at Pen Valley Stud, Morris V. Pen; sold in Chicago to Mr. T. J. Vielder of my town. Soon after her arrival I saw her and noted the following symptoms: large bulging appearance over both superior maxillaries, about 2 x 5 inches; masticated her hay badly; also her grain if given whole, poorly; this was January, 1893.

The patient being only about 22 months old, it was not deemed wise to extract the primitive teeth, but after being somewhat conservative for some time and seeing no improvement we extracted first two molars and later on the other four which speculum showed were adhered to maxillary. After this for a time improvement was manifest; then I found the first molar making its appearance, but shortly after the tooth was found to be carious and advised its removal, but owner here being persuaded to change doctors, did so, to my surprise and chagrin.

Consequently I had no further interest in her until the next September, when she was led to the hospital an object of beauty to say the least, a large opening over each sub-maxillary with an enlargement the size of a goose egg on each. After several days of restorative treatment, we went in on one side, some one having removed most of it, and as she could stand the work from time to time, until delivered of the first two molars and a large piece of maxillary. Under rigid antiseptic treatment all healed nicely and patient is now driving every day.

In this case you will observe the teeth were never fully developed; you will also observe a large deposit of cementum upon the roots of primitive, and at time of removal of primitive molars no pulp was to be seen and tooth was all split in fragments on account of blood supply being cutting off. (See William's Surg.

p. 308). I think possibly that internal treatment of iodide potassa might have accomplished a better end; but this is only speculative, as I was informed part of the treatment given her when not under my care was iodine.

Caries.—I think caries seldom occurs except as a result of pulpitis or pericementitis producing change and inflammation in dentine. True, it may occur in old animals from other sources, but even then, I think, rare. When from this source the tubes fill up with a deposit of earthy salts, but not normal dentine, not allowing any circulation to dentine again; pulpitis may suppurate producing complete loss of same. When such is the case an alveolar abscess is generally the result.

As a rule if pus forms, the pathological changes have been so severe that if allowed to go on for any length of time the oral fluids of the mouth are highly destructive to the dentine, and here permit me to say I believe the vegetable diet of the horse to be the most destructive to dentine of any foods, and when allowed to decompose with the oral fluids accomplishes then a rapid destruction of dentine and also enamel. How often do you see diseased teeth in the carnivora? And diseased teeth among the American Indians, it is said, was scarcely known. When caries arises as a sequel of traumatism, I find the teeth split up in fragments, same as when blood supply is cut off, as from death of pulp, showing it is only another means of destruction of same as in the subject here. Caries is confined almost exclusively to the molars, but may sometimes occur in incisors as subject here.

Treatment of Caries.—With all deference to our scientific veterinary dentists, who treat the teeth of our patients by filling and such like, I would in no way speak disparagingly, but must assert that I have small practical faith and as most of us here are country practitioners, dealing with a class who are interested in the advance of our profession, so long as our work is a success; but if we do our work, charge a fee, no matter what the display of skill, etc., if the operation is not a success, ten to one he will go elsewhere and probably to the grossest bungler, who will re-

move the offending member, expose to the owners eye the true condition with a free lecture about such fair surgery, he has gained the owners confidence and will, perchance, hold it and it is all this way that empyrism lives to this day. I think I have seen cases that might have been a success from filling, but as a positive diagnosis is so often uncertain that I say be sure you are right in making an extract of a carious tooth; the first essential thing and one of the most, is light, and plenty of it; next expose the crowns; have them washed clean by flushing out all food, etc., then examine with instruments; but what I use is a drill like this or a scorcher to top the crown; if there be pus in alveoli there will be an œdematous swelling externally. I have watched two or three cases where the swellings were manifest and every one came in to be extracted in from a few weeks to a few months later. This œdema will disappear in a few days after the tooth is removed; how to do this best; I prefer extracting first three superior molars if the crown will permit; when not trephine. Some practitioners split the bones with a chisel, take a punch and drive them out. I do not approve of this for I have seen several cases operated on in this manner that have done very badly; the reason being that the operation was only immediate, leaving some necrosed bone shut up to produce various diseased conditions of the surrounding parts. I observe some of our dentists recommend operating standing; I have tried this manner, but prefer the later recumbent position with a strong operating halter holding the nose up when the assistant's labors will be very much lessened and your work less annoying. If you have removed a great deal of bone for any special reasons, antiseptic dressings must be used after, and a favorite method of mine is to take a two, three or four quart syringe, make a creoline solution 1 to 20, gradually reducing each day until 1 to 60 is reached and flush freely all the exposed inner structures; this solution, when about the temperature of the body, is non-irritating; after this is done dust the cavity with camphorated boracic acid 4, iodiform 1, and fill same with absorbent cotton. I believe as Prof. Sayres, that carbolic acid, though an antiseptic, produces a

deposit of earthy salts, peroxide hydrogen or pyrozone, if you are treating the dentine, or a sinus when the cause has been removed.

Pericementitis.—This condition is one of inflammation of periodontal membrane and the vascular net work; but as this has been fully described by Prof. C. E. Sayres in the AMERICAN VETERINARY REVIEW, vol. 14, p. 144, we will only make mention of same here and add that we use aconite and arnica, but gangrene and abscesses are turbinated cases. I have frequently seen these conditions as a result of dentition and two cases I will illustrate. Several years ago I was called to examine some stock and among others a black draft, two year old colt, with one of those characteristic enlargements so often seen over the first, second or third molars during dentition. I looked upon it as of small consequence, that when tooth was cut it would probably disappear. Several months later I was summoned again to diagnose the case. I could not. He was fast losing all power of locomotion of hind quarters; symptoms somewhat that of motor ataxia very much more severe, and in spite of all treatment he finally became completely paralyzed and was destroyed.

Having seen one other case of abscess, I was suspicious of a like condition, notwithstanding the clinical symptoms were far different, etc. I paid \$8.00 to have the head and spinal column brought to my office as I had no opportunity of holding a post-mortem on the premises.

Post-mortem.—Spinal cord normal, but when the head was sawed transverse to the enlargement mentioned on maxillary a large cyst of viscid fluid mingled with pus extending up against the ethmoid cribiform plate filling up the superior turbinated bones, and to my surprise so great was the pressure from the imprisoned fluid that it did not burst the delicate structure of the turbinated. The cause here was the cutting of a molar and could no doubt have been treated successfully by trephining the frontal sinus and puncturing the delicate turbinated. When I discovered this I felt like giving the other \$2.00 for a strong man to have kicked me all over my premises, but it was not convenient to get the right man, so I contented myself by acknowledging what a

fool I had been. The other one was just about same as post-mortem which was seen.

Some time previous to this one owner complained of horse running at one nostril for several months. This upon post-mortem was found to be due to third superior molar having been split and infection through this resulting in gangrene of all the turbinated on other side with the superior filled with foetid pus. We occasionally meet with diseases of frontal sinuses and ethmoid bones, foetid discharge from nostrils, septic ophthalmia, etc., with great emaciation. I have a case of this kind under treatment now. I trephined frontal sinuses, removed the inspissated pus, then irrigated the cavity with creolin solution daily until all heals and discharge has ceased. Indeed I am of the opinion that many cases of malignant catarrh could be more satisfactorily treated in this manner than by inhalations of medicated steam, etc.

THE EXTERNAL CONFORMATION OF THE HORSE.

BY PROF. E. A. A. GRANGE, V.S., Michigan.*

(Continued from page 325.)

The withers (Plate I, 6) is that elevated portion at the top of the shoulder, the highest part of which is the point to be selected when measuring the height of an animal. They are usually described as being *high* or *low*; the latter variety, however, is we believe, more apparent than real, as the length of the bones which form them does not vary as much as one would at first be led to suppose. I have in my possession at this writing a mare, which six months ago was so high (?) in the withers that a pad had to be arranged under the pommell to prevent it from bruising those dainty parts; at this time she is ridden every day with the same saddle (which has not been repadded) and there is abundance of room between the top of the withers and the under surface of the pommell of the saddle; her withers look lower, but there cannot be any doubt but that this appearance is to be

*A reprint from Bulletin 110, Experiment Station, State Agricultural College.

accounted for by the increase of fat in the animal's condition. We think a good substitute for the expression high and low withers would be, *well defined* or *obtuse* withers, the former taking the place of the expression "high" the latter of the expression "low"; we do not pretend to say that the comparative length of the bones do not vary, but that the variation is not so great or so common as is generally supposed.

Horses with high withers, whether they be well defined or obtuse, are able to perform rapid movements with more grace and facility, other things being equal, than those in which the bones are short, making the withers *really* low. This is to be accounted for by the fact that the long arm of a lever (the trapezius muscle) is made longer, and hence its power to swing the shoulder blade backwards and forwards, like the pendulum of a clock, leverage is diminished to a greater or less extent. We are inclined to think that the view we have taken accounts for some horses which look as if they were low in the withers, and are still able to trot and perform other rapid movements with the greatest facility, and that in them the withers are really high, but they do not look so, because they are obtuse and not well defined.

In the selection of an animal, the style of the withers should be well considered. When a saddle horse is to be judged the withers should be well defined in order that the saddle may sit comfortably upon the back. Horses with obtuse, round or low withers do not carry the saddle nicely nor its occupant in a comfortable manner, as there is a good chance for the saddle to roll or become otherwise misplaced.

If the coach horse or roadster is under consideration, then those with round withers are not so objectionable, but the low variety, that is those with short bones, are not desirable, unless the action of the animal is such as to warrant them.

In draft horses there is no objection to low withers, though in a general way horses with this part well defined are usually most admired.

It is not an uncommon thing in stallions to find an appearance of the withers obliterated on account of the neck coming

down into the middle of the back as it were. Yet such animals are quite liable to produce offspring with well defined withers.

The back (Fig. I, 7) is that part of the animal extending from the withers to the highest part of the croup, a point formed by the approximation of processes belonging to the haunch or edge bones, the posterior third (approximately) of the back forms the loins, or coupling, as it is sometimes called. Some writers describe the *back* and *loins* as separate parts, but it always appears to the writer that the latter is only a continuation or part of the former, for when we come to consider roach and hollow backs, we find the anterior and posterior part of them so intimately concerned in the peculiar conformation that it is somewhat difficult to tell where one begins and the other leaves off; that is the living creature, though in the skeleton the line of demarcation is well marked, so much so, that there is good reason for those who prefer to describe them as separate regions to do so.

In selecting a horse the uses the animal is intended for must have due consideration before the back is pronounced upon as being desirable or otherwise; for instance, a horse with a tolerably long back may look well in harness, while the same creature would look entirely out of place under the saddle.

Our experience in saddle horses has led us to prefer those with short backs and strong loins with a gentle dip, not sufficient to come under the head of *hollow back*, but enough to do away the *straight edge* appearance. The dip we wish to emphasize should be very slight and more apparent as we approach the withers.

Roach-back horses are not desirable for saddle purposes, because in them the gait is usually rough, producing a degree of concussion upon the rider which is unpleasant, to say the least of it.

The horse with the hollow back is often graceful in its movements, and on that account is agreeable to ride, but the style of conformation is not admired and the deformity is liable to increase with age, and more rapidly if weight is applied to its surface.

When the back of the saddle horse is short and the loins broad, it is well adapted to carrying weight, and its various evolutions

can be performed with the greatest facility, the broad loins giving plenty of room for the attachment and development of one of the largest muscles in the body, which extends, one on each side of the spine, through the regions of loins, back and withers, and is concerned in nearly all movements of the body. We can scarcely conceive an animal doing a good day's work in the saddle, at the plough, or on the road, if this muscle is not well developed.

For harness purposes the back may be somewhat longer. The moderately long horse has a more or less rangy appearance in harness that is often admired. If an animal is intended for fast, or even moderately fast road work, the back should then be of about the same conformation as that of the saddle horse.

For draft purposes the back which has most admirers is the one which is rather short but broad and straight.

The croup (Plate I, 10 and Plate II, Fig. 14-14) is that part of the upper surface of the body extending from the highest point of the hind quarters to the dock, and embraced between two imaginary lines drawn from the quarter to the point of the hip, one on each side. When the croup is long it shows that the bones forming the foundation of it are long, thus giving plenty of room for the development of these powerful muscles which are often spoken of as the propelling powers of the animal. We give the preference to the horse with the long croup. The slope of the croup is another point which should engage our attention when studying the external conformation of the animal; many persons believe that the drooping quarters are indicative of speed, and while it must be admitted that many fast horses are so formed, yet so many record-breakers are built on the more horizontal plan, that we are forced to believe that the slope of the the croup has little to do with the animal's merits, but it certainly has with the beauty of the creature, for when it approaches the horizontal, that is just slopes a little, the tail comes from the body in a manner that admits of its more graceful and elegant carriage, which gives a finish to the contour of the whole animal that is a striking contrast to the indifferently carried tail of the drooping croup, with its low set dock.

In those horses with slanting or very drooping croups the tail usually comes out low down.

The dock (Plate I, 11) or root of the tail is a part which should always be observed when examining a horse, and the animal required to perform in its various paces, then the examiner can readily judge if there is anything radically wrong with its carriage or shape.

Many persons regard the resistance offered by the muscles of the dock when, for instance, the crupper being applied, as an index of the animal's strength and endurance, and it does seem that stiff docked horses are generally good ones, yet we have seen so many limber docked animals which were capable of performing in a most satisfactory manner, that we would hesitate in condemning the horse with the limber dock without some further evidence that it was an inferior animal.

The thorax (Plate I, 22) or chest is a region which is of great importance from every standpoint that a horse is judged, and it usually bears a somewhat close relation in shape to the kind of work nature has intended the animal to perform. For a familiar example of this we have only to look at the chest of the greyhound to see what a striking contrast it presents with his more surly neighbor, the bulldog, or observe the difference between the shape of the thorax of the English thoroughbred and the Scotch draft horse. In the former we find it deeper from above downwards and comparatively narrow in the bosom; his admirer tells us that he likes 'em deep through the girth! While the connoisseur in the draft class must have them with a good broad breast, with a large full bosom and fore legs well apart. We must not forget, however, that this narrowness of chest and fullness of bosom is modified a good deal by condition, and probably does account to a considerable extent for the well trained and thin race horse being able to gallop with such ease and precision, when the same animal if fat would go awkwardly in comparison. Our observation has led us to believe that the narrow chest, that is comparatively narrow, is more essential to the fast, easy stride of the galloping horse than it is to the trotter; but we do not

admire any horse whose front legs, to use a horsey expression, look as if they "came out of the same hole."

The shape of the entire chest, apart from the front legs and muscles connecting them to it, has been aptly compared to a truncated cone with its apex turned forwards and the truncated or cutaway part following the line of the lower extremities of the floating ribs. The ribs form a large portion of the bony framework of the chest, and to them it largely owes its shape. There are usually 18 pairs of them, which vary considerably in size and shape in all animals, whether they be draft or saddle horses, and it is generally conceded that the merits, as well as some peculiarities of the individual, depend upon the shape and length of them. The first few pairs, those that are underneath the shoulder blade are rather straight, and those behind it are somewhat bent. The ribs increase in curvature from the first pair, which are nearly straight, to the last pair, which are so much curved that they describe a considerable portion of the circumference of a circle; they increase in length from the first to about the ninth pair, and from this pair to the last they get shorter; it is this progressive shortening which gives the truncated appearance to the osseous walls of the chest. The ninth pair of ribs, being longer than the rest and being situated where they are, gives depth to the girth, the point that is so much admired, especially in horses used for any saddle purpose.

Professor Williams, one of our eminent veterinary authorities, says that "shallow chested horses are prone to heaves." In all horses the ribs should be well sprung, or have a well defined angle; that is to say, from about the 7th or 8th pair backwards they should come out from the spine in a manner approaching the horizontal, the dip downwards and soon recurve inwards, towards the central plane of the body. The angle is the part where the rib dips downwards, and when it is well defined it is a good point for several reasons; in the first place it shows that there is plenty of room for the implantation of the large muscle (*longissimus dorsi*) already referred to when speaking of the loins, then the angle does away with the flat sides so often found in

washy, delicate creatures. The ribs are considered well arranged when the distance between the last one and the point of the hip is little more than the breadth of a hand, such animals are said to be well ribbed up; but when this space is considerable, the horse is spoken of as being loosely coupled, which is frequently associated with narrow loins, the two together producing a style of conformation that is seldom fit for a good hard day's work in any capacity, while the horse that is well ribbed up, other things being equal, is usually able for anything that it may be called upon to do probably the secret is, that in such horses the chest is well formed and spacious, giving the heart and lungs plenty of room to perform their various functions with ease and comfort.

The abdomen varies perhaps more than any other part according to the feed or natural condition of the animal. Some animals are always very full owing to the actual size of the organs contained therein. When the dimensions are very large they spoil an animal's appearance to some extent, and, on the other hand, we occasionally meet with horses that will not fill up always appearing tucked up in the flank; such animals are often poor feeders and consequently not able to do a hard day's work.

The skin should be supple and loose, having an abundance of little glands whose presence and healthy condition are indicated by the glossy appearance of a well groomed coat.

The fore leg is situated upon the front part of the side of the chest, or rather that part of the leg above the elbow joint, and in a general way it responds to the six anterior pairs of ribs.

The part of the shoulder which extends from the point in an upward and backward direction to within a short space of the top of the withers, is the portion of which deserves closest scrutiny when examining the conformation of an animal, for by the incline in the anterior surface of the region we are able to tell, with more or less certainty, what kind of action the animal will have as well as judge it in some other particulars. We cannot call to mind ever having ridden a horse with straight shoulders that was an agreeable animal as far as its gait was concerned.

Horses so formed are invariably rough and stilty in the trot, and when it comes to the slow gallop they "go short" and get too far away from the ground in the stride, which is so marked in some individuals that it approaches the bucking gait, and is very different from the elastic graceful movements of the horse with oblique shoulders.

For heavy slow coach work the straight shoulder answers very well, but they are best adapted for draft purposes where the horse is seldom required to go off the walk; in this latter class the entire surface of the front of the shoulder will be flush against the posterior or draft surface of the collar, and when an animal so formed throws his weight into it (the collar), the creature will most likely feel comfortable and every effort to move the load will have, comparatively speaking, greater influence. It is not to be inferred from what has just been said that horses with oblique shoulders cannot pull and pull well; or that horses with straight shoulders cannot perform fairly well upon the road in light vehicles, but other things being equal they are best adapted to the uses assigned to them. Through for saddle purposes the parts must be oblique to modify or dispose of concussion. The space between the point of the shoulder and the elbow joint is sometimes called the arm. We do not know of any special style of conformation that needs description in this region as it is invariably formed in an acceptable manner, but below the elbow joint the leg should be thoroughly examined, and first of all we have the forearm (Plate I, 30) to take into consideration. This should be formed of well developed hard muscles standing boldly out. The circumference of the arm as measured with the tape line is not a good guide to the merits of the creature, for two reasons, in the first place when we come to measure horses by the scores, we will find in some of them, that the pectoral muscles which are concerned largely in binding or attaching the fore leg to the body, are (some of them) attached to the inside of the fore leg, just about opposite the elbow joint, while in some individuals this attachment appears lower down; so much so, that it will be included in the tape line when measuring the part, and

as this muscle is not regarded as one of the muscles of the fore arm, it seems unfair to include any of it in the measurement of that part. In the second place the skin of some animals is thicker than that of others, while a species of second skin, that binds down the group of muscles which enter into the formation of the fore arm and called *fascia* by anatomists, is considerably denser in some than in others; again fat is found filling up the parts, so as to make them appear larger, while the muscles themselves may be somewhat poorly developed; but where we find individual muscles standing clearly out by themselves, that is with slight depressions between them, amounting in some instance to grooves, and when they are firm, cordy as it were, to the touch, we may be tolerable certain that such muscles are composed of good tough fibers that can stand the strain and are consequently well developed.

It may not be apparent to all why it is so essential for a good horse to have a well developed arm, but when we come to examine those instantaneous photographs, so common in these times, we will at once see that much depends upon the perfect action of the arm in order that the pace may be continued in anything like a harmonious manner. It will be seen in Plate V, Fig. 2, that at certain stages of progression the entire weight of the body is upon one fore leg, and that the muscles of the fore arm have to carry it over a center as it were, something in the same manner as the athlete progresses with a leaping pole,—the horse must be landed on the other side of the center in a firm, steady manner in order that the next stride may be performed in anything like a proper way, for let anything interfere with the action of these muscles and the next step is so modified that it is far from perfect. We have this often well illustrated in the horse suffering from, we will say for convenience sake, a corn; the animal steps upon something, a small stone for instance, that causes undue pressure at the moment the entire weight of the body is upon the foot, or just as it is about to pass over the center, this undue pressure causes pain which shoots through the whole leg, this causes the muscles of the fore arm to wince and

the weight is not carried over the center and landed on the other side in a proper way, and the animal comes down upon its knees or stumbles along in a somewhat awkward manner, if it does not fall down altogether.

It is generally conceded that horses with long arms are best adapted for fast work, and it is so often referred to as a point of excellence in the trotter that we were led to measure a large number of horses to determine if possible whether any reliable information could be obtained from the length of the arm and its relation to speed, and our measurements go to show that the length of the arm (from the elbow to the trapezium) is greater in the roadster, proportionately speaking, than in the draft horse.

Passing on down the leg we come to the knee (Plate I, 31), this should be nearly straight as far as the outline of its anterior surface is concerned, but the posterior surface is marked by a prominent eminence which does not receive any special name except *the prominence* at the back of the knee. This prominence is far more perceptible in some horses than it is in others, so much so that it stands out boldly behind, and below this point the contour of the back of the leg dips suddenly forward, giving the part a cutaway appearance, and good horses are sometimes condemned for being too much cut away under the knee, when the part is really stronger and better formed than the average. It is true that many horses are cut away under the knee to that extent that the leg is weakened, and will not stand the constant "hammer, hammer, hammer on the hard, hard way," but we must distinguish between the horse with an unusually well developed (trapezium) bone which forms the prominence and the one which is illy formed by being too much cut away under the joint. In the former the condition is more apparent than real, for if we observe the substance of the leg from before backwards just beneath the knee we will find it broad and strong, presenting a striking contrast to the latter, which will be found shallow to that extent that it often becomes a weak link.

The knee should not bend backwards or present a concave

appearance upon its anterior aspect, as this proves a condition called *calf kneed*, a style of formation that is much objected to from the artistic standpoint. Neither should the knee bend forward, as such a condition is indicative of its having been exposed to broader work than the tissues forming it could withstand, though we occasionally meet with horses that are over in their knees, and yet able to do a hard day's work without being materially affected, but such joints present a weak appearance and are consequently unpopular.

(To be Continued.)

REPORTS OF CASES.

KALI IODIDI IN THE TREATMENT OF CHAMPIGNON.

By W. C. SIEGMUND, D.V.S., House Surgeon, N. Y.

The records of the effect of this form of treatment being yet few in number, and therefore its value not accepted by many veterinarians, the result obtained with the two following cases, are of importance—one of the patients having improved considerably and the second recovered to all appearances entirely.

The interest in these cases will also be no less when the quantity of the medicine administered will be taken in consideration. The first one received as much as 267 drachms, while under our direct treatment, that is from February 15 to April 5, and the second as much as 321 drachms—taking in some part as much as 12 drachms a day.

Case No. 1.—A bay gelding, 9 years of age, was brought to observation at a free clinic February 14, 1894. The owner stated that he owned the animal three years and that he always had a large swelling of the sheath and scrotum, which discharged a foul purulent material in winter time, healing, as it seemed, in the summer; of late the tumor has gradually and considerably increased.

Indeed the scrotum is enormous—the swelling extending more towards the right. There are several running fistulous

tracts. The hard condition of the cord is readily detected in the right groin, but the infiltration is hard and spread on the left side downwards to the sheath. There is a large granulating mass on the right, kind of semi-external scrotal growth.

The animal is in fair condition, but the condition of the parts is such that a successful operation being doubtful, a trial of the treatment by the iodide of potash was decided upon, one drachm three times a day was begun with; after a few days carried to two, and later on to three drachms three times a day.

The local treatment consisted in warm formentation, an injection of a weak solution of tincture of iodine in the fistulous tract, and cauterization of the protruding granulations as the indications presented themselves.

Towards the second week the local effects of the treatment became noticeable, as the enlargement seemed to be smaller, was less hard, and the discharge diminished.

There was, however, no general effect upon the animal, no lachrymation or disturbance of the appetite.

At the end of the third week a new tract had developed which give a profuse discharge.

By degrees the diminution in the growth began to be well manifest. On the fourth week the decrease is very noticeable; on the fifth the discharge has almost subsided, except in the fistula opened last, the growth is smaller. On the seventh week the animal was discharged convalescent, with directions to follow the internal treatment—which, however, was probably not carried out, as being too expensive for the owner.

I saw the animal about the 10th of July, he had then only a small fistula, whose edges were just moist—the tumor was reduced to about the size of a small orange.

Case No. 2.—A bay draught gelding, six years; the driver says that he had noticed a change in the animal's gait for several weeks, and that in walking the horse spread his hind legs far apart. Recently he had found that his trouble in walking had increased, and in examining the scrotum by chance, he noticed that it was the seat of a discharge.

Brought to the hospital it was found that the horse had a champignon on the right side, the size of a large fist, with enlargement of the cord running well in the inguinal canal. From three different fistulous tracts there escaped some pus of thin consistency. The general condition of the horse was good.

The animal was put under the iodine treatment with three drachms doses three times a day, carried to four drachms after two weeks' treatment. Local treatment the same as in the first case.

There was no ill effects from the administration of the medicines, the animal's appetite kept good and there was no lachrymation. The discharge soon disappeared, the fistulous tracts healed and at the end of six weeks' treatment the growth reduced to the size of a small egg. The animal was discharged and returned to his work.

MALLEINE IN GLANDERS.

By J. F. WINCHESTER, D.V.S., Lawrence, Mass.

May 6, 1894, called to attend bay gelding 15 years old, with hæmorrhage from left nostril, which continued for eight hours. The horse appeared normal, with exception of the right submaxillary gland, which was about the size of a walnut. The 7th of May pin-hole ulcer ran on left side septum. Hæmorrhage again occurred on the 14th instant, but not so copious. The horse remained in an apparent healthy condition, and it was thought desirable to test him with malleine, and after taking the temperature in his apparent normal condition for two days, the malleine was used.

June 6th, 10 A.M., 101 2-5° F.; 6 P.M., 100 4-5° F.

June 7th, 7 A.M., 100 3-5° F.; 6 P.M., 101 4-5° F.; 9.30 P.M., 102° F. injected.

June 8th, 6.30 A.M., 104° F.; 8.30 104 3-5°, 10.20 105 1-5°, 12.30 P.M., 105 3-5°, 2.30 105 3-5°, 4.30 105 3-5°, 6.30 105 3-5°, 8.30 104 4-5°.

June 9th, 10 A.M., 103 3-5°.

During the day of the 8th, the horse was still off his feed, and at point of injection a swelling occurred about three inches

in diameter, which was doughy to feel, but did not pit on pressure, and it did not pass away for nearly one week.

After a week a discharge was present from the near nostril, which was white first, not abundant, and it was intermittent; the general condition good.

June 21st, there was an apparent ulcer on the lower part of septum, and on the 22d he was killed, with the following post-mortem changes found.

General appearance good, submaxillary gland on the right side about the size of a walnut; no discharge from nostril; ulcer on septum plain.

The spleen three or four times its normal size, liver contains numerous tubercles, lungs thickly studded with tubercles, numerous centers of active inflammatory action in lungs mostly confined to anterior lobes.

Tubercular deposits in larynx; ulceration of mucous membrane covering the turbinated bone in right nostril, which had appearance of being in existence some time; also erosions of mucous membrane, pin-hole ulcer, plenty of septum. The left side of septum presented numerous chancres, but not deep, and mucous membrane covering its turbinated bones was eroded.

FATAL INJURY FROM A SLIGHT CAUSE—FRACTURE OF OSSA INNOMINATA—INTERNAL HÆMORRHAGE AND DEATH,

By O. FAUSNER, D.V.L., House Surgeon,

On the 25th day of April, when passing along Lexington Avenue, noticed large bay gelding about sixteen hands high, down on the street, struggling hard to get up. Several men and the coachman were trying to assist him, but all attempts failed; at last one decided to throw ashes on the pavement, the whip was applied freely, the animal tried to get up on his fore legs, stayed in that position for a few seconds and fell again. The pavement was smooth and wet, which made it very slippery, the ashes did assist some, but the animal didn't seem to have any power in both hind legs. Many attempts were made,

and at last the animal was exhausted, lay there wet with perspiration and breathing rapidly.

The history concerning this animal is very brief and as follows:

He was driven a short distance, one block from the stable, and while standing in front of the owner's mansion, a city sprinkling wagon came along, the horse became frightened, pranced and jumped and finally fell, being afterwards unable to get up.

The ambulance was called and he was removed to the hospital at 2 P.M. The animal was put in a box stall. He showed great colicky pains, looked towards his side, made some attempts to get up, was put in slings and raised, but was entirely unable to stand up. There was sensation and motion of the hind legs. The animal kept on struggling until 4 o'clock, which after all attempts to quiet him had failed, he died.

At the post mortem the abdomen was found to contain a large quantity of blood, about a pail and a half full, the cellular tissue of the pelvic cavity as well as the bladder were infiltrated with blood. The ischio-pubic symphysis on its whole extent, the floor of the right pubis, the ilium at the neck on the right side as well as the internal angle of that bone were shattered in a large number of pieces of various dimensions. The blood-vessel through which the hæmorrhage had evidently taken place and probably caused the death could not be made out.

Taking in consideration that the horse was much advanced in years, is it not singular to have with such extensive lesions as the result of a slip and a fall.

PUNCTURED WOUND OF PERINEUM,

By G. A. JOHNSON, D.V.M., Sioux City.

Read before the Western Iowa Veterinary Medical Association.

On the evening of March 14th, was called to see a mare reported as being enagged; arriving at the place about 9 P.M., I found a standard bred mare weighing about 1000 pounds, and about eight months in foal, suffering from a punctured wound of

the perineum, contracted while in a lot with other horses, presumably the result of kicking and striking the handle of an iron pump, as this was the only thing in the lot that could have caused such a wound. The wound extended along the perineum, just at the edge of the hair, parallel to and about the same length as the vulva.

Having syringed out the wound with a strong solution of creoline introduced my hand, and to my surprise followed the track of the wound forward along side of and partially under the vagina and bladder into the abdominal cavity.

Hastily examining the parts to ascertain if there was any splinters or debris, and finding none except a few blood clots, and some shreds of lacerated tissue which I removed, then injected more of the creoline solution, a portion of which entered the abdominal cavity, but was forced out by the mare straining. Then opened the wound as far as possible and dusted the walls, by means of a powder gun, with a powder composed of two parts, by weight, of pulverized hydrastis and one part of boric acid, then took two interrupted sutures in about three inches, thus bringing the walls of the wound into close apposition, then closed the external wound with three pins and one interrupted suture. Then made an opening in the perineum, about three inches below the wound and up to the cavity and put in a drainage tube, then placed a pad of absorbent cotton over the parts and held it in place by means of a cement made as follows:

℞. Common varnish, $\bar{\text{z}}$ ii; zinc oxide, two parts; boracic acid, one part; to make paste, mix, and apply to hair around wound, then apply pad, and as the cement readily dries, it holds pad in place. This makes a very good cement to hold pads or bandages in place.

Prescribed the following internally:

℞. No. 1, F. E. belladonna, $\bar{\text{z}}$ iss; F. E. aconite, 3 iii; spirits rectified, q. s. $\bar{\text{z}}$ iv; mix. Sig. Give two drachms every four hours, also ℞. No. 2, Potassium iodide, $\bar{\text{z}}$ i; soda hyposulphite, $\bar{\text{z}}$ iii; pulverized hydrastis, $\bar{\text{z}}$ iss; mix part powders No. 12. Sig. Give one powder three times a day in feed.

March 15th, about sixteen hours after the accident had occurred, appetite good, pulse normal, temperature 102° F. Respiration normal; very little swelling except in leg. Treatment continued same as above, except stopped using R. No. 1.

March 17th, about sixty hours after accident, appetite gone; breathing rapid and labored; flank tucked; pulse rapid, thready and weak; temperature 105° F.; some tenderness of the abdomen; syringed out wound with creoline solution; continued same line of treatment and again used R. No. 1, two drachms every four hours. Evening of same day, breathing easier; pulse slower and stronger; temperature 103° F. Appetite improving.

From this time on the case made a very rapid recovery, and the mare dropped a healthy foal on June 26th. This case demonstrates the possibility of successfully treating cases when the abdominal cavity has been penetrated.

EXTRACTS FROM GERMAN PAPERS.

BY RICHARD MIDDLETON, D.V.S., Philadelphia, Pa.

FOREIGN BODIES IN THE RETICULUM.

For a period of five years Schöbert has successfully used the following method for the removal of extraneous substances from the digestive tract. It is only indicated when heart injury or pyrexia is not present; the latter is here to be interpreted as symptomatic of suppurative infection.

After casting the patient, the four feet are bound together, a stout post or beam thrust between the limbs, and the animal turned upon the back—which position is to be maintained throughout the manipulation, and places himself on a chair upon the left side of the patient, and works from this point with one foot, upon the left epigastric region posterior to the ensiform cartilage of the sternum.

Six to ten kicks or pushes with the foot is usually sufficient to dislodge the foreign body from the walls of the reticulum.

This procedure was suggested by the fact that cattle in the

abattoir are always placed upon the back in the process of dressing, and any extraneous substance which may be present in the reticulum becomes dislodged and lies in the organ with other material. His process in its application, *intra vitam*, speaks favorably for this system. If the case be one of long standing and rumination has already stopped, a drastic purgative should be given at once.

Out of a total of sixty patients treated in this way, only two failed to recover. One of these manifested increased pain after the massage, and being slaughtered a bent needle was found imbedded in the walls. The diagnosis, naturally a difficult one, and is mainly to be reached by exclusion and the presence of digestive disturbance.—*Monats. f. prakt. Thierheilk. Bd. Hii.*

PUNCTURES OF THE UTERUS.

After every parturition the careful operator should seek for wounds of the uterus and vagina made during the passage of the foetus or its membranes. Injuries of these organs furnish an easy means of infection, and must receive therefore prompt attention. Increase in temperature and pulse rate, thirst, tenesmus, and accelerated respiration after birth, should lead to an examination of the birth passages, even when the discharge from same possesses no evil smell.

The wounds which one meets, generally involve the cervical and vaginal walls; the most serious of these is puncture made by the slipping of the parturition hoof from the foetus, or the entrance of a bone into the submucous tissue—a so-called hollow wound being the result.

The treatment requires the greatest attention, especially when a decomposed foetus or membranes are to be dealt with. Injection of simple disinfecting fluids is insufficient to obtain the required result.

Albrecht recommends the following as the most practical and safest method. Through irrigation of all parts of the uterine cavity with a disinfecting solution. After this, the introduction of a tuft of cotton or wad of cheesecloth, previously soaked

in a 10% carbolic or 30% creoline or lysol solution, into the cavity of the wound, and carried to its fundus. The removal of this dressing is facilitated by tying a string to it, and permitting the same to protrude from the lips of the vulva.

A tear or rent in the cervical walls is to be well cleansed of all shreds by the use of the finger-nail, or suitable instrument—the sharp spoon being suitable for this purpose—and a disinfectant applied on a tent of cotton. Renewal of the dressing in the hollow should, at first, take place more than twice daily, and must be kept up until the temperature returns to normal. After the second or third day A. uses an emulsion of iodoform and glycerine on the tampon of cotton. If the wound is easily accessible an atomizer may be used advantageously in the dispersion of iodoform oil 1.10, or lysol, glycerine 1.10.

The tent in the wounded cervix may be kept in place by filling the calibre of the cervix with oakum, this holding the tent in continuous contact with the wound; this procedure may induce labor pains, but they are ephemeral. Previous to each local application it is advisable to irrigate with warm infusions.—*Woch. f. Th. u. Viehz. No. 16.*

REMARKABLE FOREIGN BODY IN THE DOG.

Veterinarian Reichenback reports in the "Schweiz. Archiv. Bd. 35," the case of a St. Bernard dog that swallowed a piece of wood *twenty-eight inches* long and one-half inch in diameter. The anterior end was located directly anterior to the aperture thoracis, and had moreover about its middle a brass band or ring. The animal was valued at 600 francs.

Previous to the operation the animal was anæsthetized and then a longitudinal incision made in the œsophagus; considerable hæmorrhage did not take place, and by means of a pair of stout artery forceps the object was withdrawn. The latter, when placed horizontally, reached from the external wound to the base of the caudal appendage.

R. closed the wound, and placed a bandage upon the same,

not entertaining the least idea, however, that the patient would recover the internal damage which he supposed the object had wrought.

Upon regaining consciousness, the animal staggered around the yard, drank a bowl of water and indicated a temperature of 106° associated with great thirst.

The urine passed was a reddish color. On the subsequent day the dog was cheerful to a surprising degree, the febrile condition had disappeared; irregular respiration only remaining.

For three days no fæces had been passed. On the fifth day the sutures were removed; only fluid nourishment being tendered the patient. The wound now began cicitrizing, and the irritation due to this natural process, induced the animal to scratch it; the result was an abcess of considerable extent, which in its turn was also evacuated.

The dog finally made a complete recovery. This case is truly a paradoxical one; how the body contained such a long object as that mentioned, without being lacerated fatally, is beyond all conjecture. It is not to be supposed, that of his own volition, the patient actually swallowed this stick; but rather that having had one end of it in his mouth and accidentally receiving an impulse upon the other free end it was forced literally down his throat.—*Berliner Wochenschrift*.

SARCOMA OF THE PERIOSTEUM.

In the dog it is not uncommon to find a general sarcomatous condition of the lymphatic glands, associated with symptoms simulating leucæmia. The observation of Fröhner, however, is somewhat out of the usual line; he reports a case of extensive sarcoma formation of the periosteum with metastatic affection of the kidneys and lungs, which lesions induced symptoms of an exceedingly painful arthritic rheumatism.

On May 30th a seven-year-old male pointer was brought to the hospital, with the history that for the last three weeks the same had evinced pain and lameness in rising and walking, and especially when ascending steps. The rectal temperature indi-

cated 103° F.; lameness in each of the four limbs was recorded; the bones being thickened, and painful upon manipulation, more so in the vicinity of the articulations.

The treatment for arthritic rheumatism was commenced, but no assuaging of the pain, or improvement in locomotion was secured. After five weeks pneumonia complicated the case, and the animal was destroyed. The subcutaneous tissue of the anterior and posterior limbs was infiltrated and the bones themselves uniformly thick and hard. Longitudinal sections of the shafts of the long bones exposed nothing abnormal except an infinitesimal quantity of calcareous particles in the marrow, which indicated *osteomyelitis ossificans*.

On the contrary the external surface of these bones was uniformly covered with deposits of irregular elevation, which had commenced to ossify. The synovial membranes were practically intact; periarticular tissue, on the other hand, much more abundant than normal, consisting of round cells of various sizes, and large spindle-shaped cells. Stomach, intestines, spleen and liver normal. Upon the surface of the kidneys herds of gray white globules. In the posterior lobe of right lung a fluctuating tumor the size of one's fist, which consisted of one central portion, and several smaller ones whose interior was more or less in fluid degeneration. The case was one, therefore, of periosteal sarcoma.

Some years previous Dieckerhoff recorded a case of a horse belonging to the royal stables and affected with general sarcoma, involving all the bones of the skeleton. The growths or deposits were all ossified, hence he designated it osteo-sarcoma.—*Monatshefte f. prakt. Th.*

SARCOMA OF TESTICLE.

• For a period of two years a fifteen-year-old stallion had exhibited swelling of the left testicle. Lately the circumference of this growth perceptibly increased, until, when brought to us, it was very little if any smaller than a citron melon. By castration the epididymis proved to be ten times its usual measure-

ment, the weight of the testicle indicating $12\frac{1}{2}$ pounds; the same was 10 inches in length, 7 in breadth and 8 in thickness.

In the parenchyma of this enlargement numerous collections of creamy suppurative pus, contained within scirrhous or indurated knotty tracts. Microscopical examination confirmed the diagnosis of medullated carcinoma. After the operation the general condition of the patient was somewhat affected. After twelve days this state became more serious by the appearance of a high fever, the patient succumbing a few days later.

Post-mortem exposed carcinoma of the spermatic cord; cancerous infiltration of the mesenteric and thoracic lymph glands, with metastatic tumors in the lungs, spleen and inguinal regions. The middle portion of the biceps femoris, where it joins the aponeurosis on the left side, had been lacerated, probably during the act of casting. Bunod reports in *Journal de Méd.*, 1867, an encephaloid cancer of the right testicle which weighed 9 pounds (4500 gr.). Also in this case subsequent fever, great swelling and dyspnoea, death and metastatic tumors in various parts.

Bayer suggests, therefore, that the appearance of the carcinoma in other parts of the body—or at least their virulence—to be primarily due to the operation itself. As additional proof of this he mentions a lymphatic swelling in the inguinal region, which had so augmented since the operation as to be almost the size of the original tumor.—*Oestew. Zeitschr.*

LUXATION OF THE FEMUR.—We were lately called twice in one week to see cases of displaced femur. The first was in a cow, three days after it had occurred. This animal had slipped while urinating, and was unable to rise without assistance; we diagnosed luxation of the hip upon the left side. The head of the femur had glided downward into the ischial foramen, in which location we discovered it by rectal examination. Crepitation was discernible upon movement of the limb. Temperature not increased; appetite normal.

The second case was that of a bull which had, during attempts at coition, fallen violently to the ground. The animal

was unable to rise, and upon our arrival two hours later we were unable to induce movement of the posterior extremities, even by use of the sling.

Manipulation determined the cause to be dislocation of the femur, with the head of the same inferior to the acetabulum. In both instances our attempts at replacement were futile; we applied chloroform and external taxis in the case of the bull, but without the desired result. The animals were slaughtered, and their meat utilized; pelvic fracture was not present.—*B. T. Woch.* 11, '93.

CITRULLINE AS PURGATIVE.—According to *Archiv. f. wiss. u. prakt. Th.* Baum has just concluded experiments upon the application of citrulline or colocynthin as a purgative agent; his results confirm those of Ellenberg. Kohlstock had previously used this medicine in clysters, and records the fact that subcutaneous injections are not advisable, from their painful character.

Baum administers the agent to all the domestic animals as a clyster. He gives to horses a mixture of 1 to 15 gr. of citrulline in 6 ounces of alcohol and glycerine; This occasions a prompt movement. The action is more severe when divided into four parts and one part given every half hour. In swine we have in this remedy a safe and sure purgative in 1-15 gr. doses, and here it is also associated with glycerine and alcohol. Dogs take 1-20 gr. Sheep seem to resist its action longer than any of the common animals.

LORETIN.—This agent, discovered by Prof. Klauss of Friedberg, is intended as a substitute for iodoform, for which so many medicines have already been placed upon the market. Previous experiments by Dr. Augerburg have proven the absence of any toxic character. The author dusted the powder upon a wound that had been discharging for three weeks; the injury was fully the size of one's palm, and healed perfectly in four weeks.

After this the powder was used by Fengling in several wounds, and its good results confirmed. In parasitic skin diseases dusting the powder over the affected patches, after

previously subjecting to a thorough cleansing, is sufficient to accomplish dispersion.

Loretin is free of any secondary working; it is yellow in color and completely odorless; slightly soluble in water 1:130; when strewn upon the surface of a wound it forms a crust, protecting the same. Besides this it is applicable as a sodium salt wherein a watery solution; chemically it is metaiodorthoxy-chinolinanasulphric acid and forms with sodium carbonate a neutral salt, very soluble in water and useful in a one or two per cent. solution as a cleanser of wounds.

Loretin dries more rapidly than iodoform. In eczema and blood-ear of the dog its exhibition has been of value. Also when combined with collodium 2.4% it forms a good application. —*Deutsch. Th. Wochenschrift.*

ACUTE LEAD POISONING IN CATTLE.—In November and December, 1893, a farmer lost eight cattle within a few days. We were called to see the ninth patient which, after having the history of the others, we promptly placed under heroic treatment. This animal exhibited strong salivation amaurosis, attacks of delirium and falling fits. In the other eight cases the slaughtered animals all showed hyperæmia of the cerebrum after death. The ætiology of the affection remained most obscure until the owner accidentally remarked that a considerable quantity of white lead had been thrown upon the manure heap, previous to its being scattered upon the meadow where the animals fed. The flesh of the subjects was consumed without deleterious effects. —*Lchweiz Archir*, 24, '93.

INOCULATION OF ANTHRAX.—The experiments which up to the present time have been prosecuted upon the inoculation of the bacillus anthracis, by means of injection in the cornea, have been of negative results.

Strauss, after cocainizing the optic organ, introduced cultures of the bacillus containing spores and blood between the lamellæ of the cornea. In four out of five cases he observed an anthracoid keratitis, followed in seven to eleven days by a general

infection, and finally death of the experiment animal. The anthrax œdema encroached upon the eyelids, thence to the face, ultimately reaching the neck. Strauss compares his researches with similar experiments which he conducted in company with Chambon and Menard, upon the inoculation of vaccine virus through the cornea of the calf. In this instance he was also successful in securing a keratitis and immunity, although the latter developed slower than the ordinary method of vaccination.—*Fortschritte der Medicin*, No. 10.

EFFECT OF TEMPERATURE UPON TUBERCLE BACILLUS.—The experiments upon the resistance offered by the bacillus tuberculosis, as found existing in the milk of phthisis cattle is concisely tabulated as follows: The material used in the trial was confined in small glass tubes, and subjected to heat transmitted indirectly through a water bath.

At a temperature of 101° F. four hours were required to kill the bacillus; at 140° F. one hour; at 158° F. ten minutes; at 176° F. five minutes; 194° F. two minutes; at 203° F. one minute.

A temperature of 122° F. was insufficient, after twelve hours' action, to destroy the tubercle. At 154.4° F. the taste of milk becomes altered, this fact is of paramount importance, for if milk be heated at 149° F. for fifteen minutes, the dangerous quality of the same becomes annihilated.—*Allg. Med. Centralzbg.* 78.

JABOT.—A horse in the 49th Uhland Regiment had refused his morning rations. One and a half hands anterior to the caruiciform cartilage of the sternum a movable, hard swelling was situated, the size of one's fist.

The patient was apathetic, and vomited continuously; a painful cough was heard now and then, subsequent always to the retching movement. The case was diagnosed one of foreign body in the œsophagus, and the operation for its removal was immediately commenced.

The swelling vanished, but returned at once the animal re-

gained his feet. In the following two days the difficult deglutition disappeared, and the tumor likewise. In eight days the animal was again reported as indisposed. Great pyrexia pervaded the body, and the diagnosis of pneumonia, evidently of traumatic origin, was reported. Fourteen days later the patient succumbed.

Post-mortem revealed a diverticulum of the œsophagus at a point corresponding to the region occupied, *intra vitam*, by the external enlargement. The mucous membrane was in shreds and necrotic. Also another rupture of the gullet in its course through the thorax.—*Sachs. Vet. Ber. 1892.*

BIBLIOGRAPHY.

Hygiene of Domestic Animals by H. Boucher of the Veterinary School of Lyon with introduction by Prof. C. Cornevin. 1 vol. in 16 mo. J. Baillière & fils, 19 rue Hautefeuille, Paris.

This book is the third volume of the Cadeac Encyclopedia, and in it, under a concise, clear form, and in conformity with the most recent discoveries and applications of veterinary hygiene, will be found the most precise notions relating to the study of the proper means to keep animals in health, and protect them against injuries or diseases likely to diminish their value.

In the first part the author studies the soils, water, atmospheric and climatic influences, and after examining their various physical and chemical properties, their constitution, preservation, bacteriological condition, etc., this part is completed by the consideration of the subject of acclimatization.

In the second part, stables and their construction, harnesses, grooming and feeding furnishes very interesting material for consideration. This part is probably the most important of the work; contains no less than 200 pages and presents to the reader a review of the various food of vegetable and the animal origin with a consideration upon their composition, digestibility, mode of preparation, sophistication and preservation.

Like its predecessors, the third volume of the Encyclopedia

is written in a pleasant reading manner, well printed and bound. One more good addition to classical veterinary literature..

Précis de Pharmacie Vétérinaire pratique. By Mr. M. Ducassé, of over 500 pages with 40 illustrations; Asselin et Houzeau, Paris.

A nice volume where, after a few general considerations seven chapters present the subject of veterinary pharmacology in a concise, yet complete manner. The sixth and seventh chapters contain a long list of the various veterinary preparations in use with the peculiar manners in which they are put up. The tinctures, various solutions, mixtures for baths, drenches, counter-irritants, electuaries, extracts, etc., etc., with their preparation, doses, indications, are not useful for the veterinarian who generally makes his own drugs, as is commonly the case in country practices and are well described in Mr. Ducasse's work. A good similar work in English would no doubt prove very useful.

A Manual of General Histology by W. S. Gottheil, M. D. (Sabiston, Murray & Co., New York.)

A very concise book of just one hundred and sixty-eight pages, most interestingly written for beginners in the study of Histology; not doing justice however, to the well known ability of the author.

Horse's Teeth by W. H. Clark, (Wm. R. Jenkins, New York.) The fourth edition, re-revised of a work which contains as its predecessors many pages of valuable information, but which besides has a second appendix in which we notice four very interesting pages on the "Marks of the Equine Age among the Ancients."

Mr. Clarke deserves a good deal of credit for this special work and we hope he will receive ample proofs of the public's appreciation for it, specially from veterinarians.

Eighth and Ninth Annual Reports of the Bureau of Animal Industry, 1893. Containing in detail the work accomplished during 1891 and 1892, and with its several additional articles on the "Condition of the Poultry and Egg Industry" by Dr. J. A. Dodge; on the "Mule, its uses etc., etc." by Mr. J. L. Jones; on "The Bottom Disease" in South Dakota, by Dr. E. Schroeder.

BOOKS AND PAMPHLETS RECEIVED.

L'Age du Cheval et des principaux animaux domestiques, by Mr. M. Dupont. (Baillière et fils). *Guide Pratique Vétérinaire*, par Mr. J. A. Lacassin. (Baillière et fils). *Die Subcutane Myotomie des Schweifes bei Pferden*, by Dr. P. R. Brüchert, (Richard Schoetz, Berlin). *Castration du Cheval Cryptorchide*, by Prof. P. J. Cadiot, (Asselin et Houzeau). *La Pncumo Enterite septique des veaux*, by Prof. V. Galtier, (Asselin et Houzeau). *La Vie et l'Energie chez l'animal*, by A. Chauveau, (Asselin et Houzeau). *La Rage et les Moyens de s'en Preserver*, by Prof. E. Nouved, (Revue Scientifique). *La Malleine ses applications pratiques*, by Prof. E. Nocard, (A. Maulde & Co., Paris). *La Tuberculose Bovine*, by the same.

Journals exchanged.—Veterinarian, Veterinary Journal, Veterinary Record. Journal of Comparative Pathology and Therapeutics, Recueil de Médecine Vétérinaire, Revue Vétérinaire, Journal de Zootechnie, Progrès Vétérinaire, Presse Vétérinaire, Annales de Pasteur, American Veterinary Magazine, Clinica Veterinaria, Schweitzer Archiv, (Zwirsch), Gaceta de Medicina Veterinaria, (Madrid), Giornale di Medicina Veterinaria Pratica (Torino), Zeitschrift für Veterinarkunde, (Berlin), Der Hufschmied, (Dresden), Wochenschrift für Thierheilkunde und Viehzucht, Revue für Thierheilkunde und Thierzucht, (Wien), &c., &c.

SOCIETY MEETINGS.

NEW YORK STATE VETERINARY MEDICAL SOCIETY.

The Fifth Annual Meeting of the New York State Veterinary Medical Society, will be held at Albany, N. Y., on Wednesday and Thursday, September 12 and 13, 1894.

The meeting will convene at 10 o'clock A.M., September 12th.

After a short business session the following very interesting papers will be read and discussed.

By Prof. James Law, subject, Tuberculosis.

By Prof. A. Liautard, subject, Veterinary Education in Relation to Veterinary Practice in New York State.

By Dr. E. H. Nodyne, subject, Tetanus.

By Dr. C. D. Morris, subject, Meat Inspection.

By Dr. J. M. Chase, subject, The Use of Creoline Compared with other Antiseptics.

By Dr. Geo. H. Berns, subject not decided.

By Dr. F. J. Thornbury, subject not decided.

Also other papers will be read and discussed.

Every veterinarian in New York State should become a member and take an active part in the workings of this Society.

Notices and programmes will be mailed to all veterinarians throughout the State.

Blank applications for membership will be furnished to all who apply to the Secretary-Treasurer for same, and can be acted on at the next meeting if properly filled out and returned on or before September 5th.

Very respectfully,

N. P. HINKLEY, D.V.S.,

Secretary-Treasurer, N. Y. S. V. M. S.,
395 Elliott St., Buffalo, N. Y.,

To whom all correspondence should be addressed.

TO THE UNITED STATES VETERINARY MEDICAL ASSOCIATION.

Rates of $1\frac{1}{3}$ fare have been made over the following railroads in trunk line passenger territory, to wit:—

Addison and Pennsylvania; Allegheny Valley; Baltimore and Ohio (Parkesburg, Belliare and Wheeling, and east thereof); Baltimore and Potomac; *Bennington and Rutland; Camden and Atlantic; Central of New Jersey; *Central of Vermont; Chautauqua Lake (for business to points in trunk line territory); Cumberland Valley; Delaware and Hudson Canal Co.; Delaware and Lackawanna; Elmira, Cortland and Northern; Fall Brook Coal Co.; *Fitchburg; Fonda, Johnstown and Gloversville; *Grand Trunk; Lehigh Valley; New York Central and Hudson River (Harlem division excepted); New York, Lake Erie and Western; New York, Ontario and

* Only for business originating at, or destined to, stations on the direct lines of these roads between Troy, N. Y., and Montreal, Canada.

Western; New York, Philadelphia and Norfolk; New York, Susquehanna and Western; Northern Central; Pennsylvania; Philadelphia and Erie; Philadelphia and Reading; Philadelphia, Wilmington and Baltimore; Rome, Watertown and Ogdensburg; Western New York and Pennsylvania; West Jersey; West Shore; Wilmington and Northern.

To annual meeting in Philadelphia Sept. 18, 19, 20, 1894.

Members when buying tickets apply for same thirty minutes before train time, and secure a certificate from agent from whom the ticket is purchased.

T. J. TURNER, *Sec.*

OHIO STATE VETERINARY MEDICAL ASSOCIATION.

The Ohio State Veterinary Medical Association will meet at Millersburg, O., September 26th at 7 P. M., and 27th at 9 A. M., during the County Fair. Important business and valuable papers will be read, and a profitable and good time is anticipated.

W. H. GRIBBLE, *Sec.*

CORRESPONDENCE.

TUBERCULOSIS IN NEW YORK STATE.

MIDDLETOWN, N. Y., July 4, 1894.

Editors of AMERICAN VETERINARY REVIEW:

GENTS:—I would like to call the attention of the proper authorities, through the REVIEW, to the condition of the dairy stock in this part of Orange County.

About a year ago I began to make an investigation regarding the prevalence of tuberculosis in this locality.

Among the herds examined by me, was that owned by the State Hospital in this city. In which case I used tuberculin; about one-half (30) cows, were found to be affected, these have since been killed.

In another dairy of about thirty cows, fully one-fourth of them have tubercles in the mammary glands, the latter condition is of common occurrence in this vicinity. I am frequently

called to see two or three cows at one time with acute tubercular mammitis, especially is this the case after cold storms.

There is scarcely a week passes but what I am called to examine tuberculous subjects.

What are we going to do with them?

I have repeatedly notified the State Board of Health, but have never been able to have anything done with these herds.

It is a common occurrence to see tuberculous subjects killed for beef, even the emaciated subjects are sold for from two to five dollars, to be used up in the manufacture of bolognas. Orange County is one of the largest milk-producing counties in the State, consequently there are a large number of cows which are not profitable for the dairy killed for beef.

There is not to-day a Veterinary Inspector in Orange County. Is it not time that some competent man was appointed to put a stop to such traffic.

Respectfully yours,

J. S. SUTCLIFFE, V.S.

TUBERCULOSIS OF THE HEART.

MIDDLETOWN, N. Y., July 4, 1894.

Editor of AMERICAN VETERINARY REVIEW:

DEAR SIR:—In the various reports of post mortem examinations of tuberculous subjects, I seldom, if ever, have read of the lesions being located in the heart. A well marked case came under my observation a short time ago. The subject a grade Jersey, was very much emaciated, unable to rise without assistance. I informed the owner of the nature of the disease, and advised the killing of the cow, which was done next day. Post mortem revealed hypertrophy of the heart, it being about three times its normal size. The tubercular deposits were scattered all through the muscular tissue, and small nodules almost covered the outer surface, the lungs and pleura were also affected.

Respectfully yours,

J. S. SUTCLIFFE, V.S.

REPLY TO FACULTY OF ONTARIO VETERINARY COLLEGE.

Editor of AMERICAN VETERINARY REVIEW:

DEAR SIR:—The following classified and special advertisement appeared with others inserted as reading notices on page 620, *Spirit of the Times*, December 2, 1893, and I deemed it my duty to report it to the "Pennsylvania State Veterinary Medical Association," and will, in due time, bring it before the "United States Veterinary Medical Association."

"The session of 1892-'93. The new session of the Ontario Veterinary College is now well under way, but yet not too far advanced for the accommodation of new students. This college is run in connection with the Agricultural and Arts Association, and is one of the very best in America. Established in 1892, it has maintained a prestige that is beyond compare, because its teachers and lecturers are the very best in the country. For terms, length of course, etc., address Professor Smith, Veterinary Surgeon, Toronto, Canada.

It is evident that the above article is undoubtedly a classified and special advertisement instead of an editorial, notwithstanding all assertions to the contrary. They generally charge about fifty cents a line for each insertion of this style of advertising inserted as "reading notices" among the ordinary printed matter. The above style of advertising is condemned by all reputable medical and veterinary associations and societies in all parts of the civilized world, as it is a violation of the code of ethics.

The session of 1893-'94, Ontario Veterinary College, began Wednesday, October 18, 1893, and closed March 24, 1894. It seems strange that they would have the audacity to publicly advertise for students to enter college forty-five days after the session began, and only one hundred and twelve days before commencement, not deducting any time for the holidays vacation. Would that not make a very short session?

Joseph M. Good graduated at the Mississippi Agricultural College last year, and received his degree of Bachelor of Science, then he entered the Ontario Veterinary College and attended only one session and graduated on March 24, 1894, and received his degree of Veterinary Surgeon from the Ontario Veterinary

College. It would require more than an "elastic imagination" to prove that that was in accordance with Professor Sweetapple's statement about two sessions.

Facts are not falsehoods any more than advertisements are editorials. "A rose by any other name would smell as sweet."

Very respectfully,

JAMES A. WAUGH, V.S.,
Graduate of Ontario Veterinary College, 1882.
Allegheny, Penn.

THERAPEUTIC NOTES.

From some of our medical exchanges, *The Therapeutic Gazette*, *The Medical Press*, etc., etc., we extracted the following recommended preparations as likely to find a beneficial application in our practice.

For Eczema:—

℞. Ol. amygdal. sul.
Glycerini aa. f. 3 iii.
Zinci oxidi, 3 iss.
Mix.

To promote contraction of
fistulous tracts:—

℞. Camphore, ʒ i.
Salolis, ʒ p.
Etheris, f. 3 i.
Mix.

For Burns:—

Olive oil, ʒ ii.
Salol, 3 iii.
Lime water, ʒ ii.

For Granular Conjunctivitis:—

℞. Mercuri oxide, gr. iii.
Zinc. oxide.
Thymol.
Muriate of cocaine. aa. gr. ijs.
Camphor, gr. ss.
Vaseline, ʒ i.

Or again:—

℞. Acidi borici, 3 parts.
Iodoformi, 2 parts.
Aristol, ijs.
Mix.